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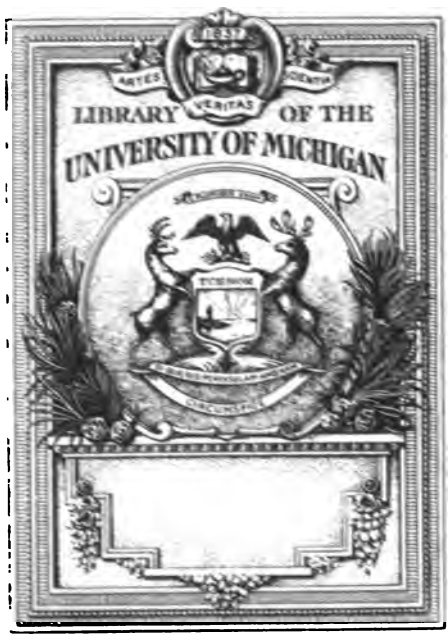

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TRANSACTIONS

OF THE

THIRTY-SECOND ANNUAL MEETING

OF THE

Ohio State Medical Society,

HELD AT

PUT-IN-BAY,

JUNE 12th, 13th and 14th, 1877.

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THIRTY-SECOND ANNUAL MEETING

OF THE

OHIO STATE MEDICAL SOCIETY,

HELD AT

PUT-IN-BAY, JUNE 12th, 13th and 14th, 1877.

—o—

FIRST DAY.

AFTERNOON SESSION.

The society met at 2 o'clock P. M., in the hall of the Put-in-Bay House. In the absence of the retiring President, the meeting was called to order by Dr. T. W. Gordon, first Vice-President. Previous to introducing Dr. W. J. Scott, President elect, Dr. Gordon proceeded to give a short biographical sketch of that gentleman in accordance with a custom observed by the Medical Associations of Europe—especially in England. By observing this custom, the speaker remarked, a history of our Presidents would be obtained which might prove useful to the historian—be convenient for reference, besides acquainting us with the character and attainments of gentlemen who are honored from time to time in being selected to preside over the deliberations of this Association.

BIOGRAPHICAL SKETCH OF DR. W. J. SCOTT, M. D.
PRESIDENT ELECT.

"Dr. W. J. Scott, now of Cleveland, was born in Culpepper Co., Virginia, January 25th, 1822. His father emigrated to Ohio in the year 1831, and settled in Knox Co.

The subject of this sketch entered Kenyon College in 1843, and graduated in 1848; was tutor in college in 1849 and 1850. During this time he studied medicine with Prof. H. S. Thrall, who was at that time Professor of Chemistry.

Attended one course of lectures at Cleveland Medical College, during the winter of 1849–50. Was made Professor of Chemistry in Jefferson College at Washington, Mississippi, in 1851. Resigned in 1852. Practiced medicine at Stradville, Franklin County, Ohio, ten years, preceding 1865. Was elected a member of the Ohio State Medical Society in the year 1855.

Was appointed to the chair of Materia Medica in Charity Hospital Medical College in Cleveland, in 1864, and removed to that city in 1865. He accepted the chair of Theory and Practice of Medicine in the same school in 1866, in which position he has remained to the present time. Last year, 1876, as you all know, Dr. Scott was, by your suffrages, elected President of this society, and gentlemen, from a personal acquaintance of many years, I can assure you, that large as are his physical proportions, his mental powers are their equal in every respect."

Dr. Gordon then introduced Dr. Scott, who proceeded to thank the society for the honor conferred on him in being called to preside over the deliberations of this body. He would endeavor to make such decisions as would advance the business and interests of the society. If mistakes occurred as no doubt they would, in deciding points of order, they should be charged to the head and not to the heart.

The President announced that a clergyman could not be had to open the proceedings with prayer, as was the usual custom, therefore that ceremony had to be dispensed with.

REPORT OF THE EXECUTIVE COMMITTEE.

ADDRESS OF WELCOME.

MR. PRESIDENT,

And Gentlemen of the Ohio State Medical Society:

On behalf of your Executive Committee, I have the honor and the pleasure of extending to you on this third anniversary of your meeting at Put-in-Bay, a hearty welcome.

We welcome you in the name and on behalf of those members of the society who attended the meetings held here in 1875 and 1876, and with such general unanimity selected this delightful spot as your place of meeting this year; feeling that in so doing more work could be accomplished in a given time than elsewhere, and that during the intervals of work the finest scenery on Lake Erie would be within the vision of all; thus doubly compensating each member for turning his face and directing his steps to our Medical Mecca of this year.

Again bidding you a hearty welcome, allow me to express the hope that our deliberations may be characterized by a spirit of earnest labor in the interest of legitimate medicine, that we may each feel that it was not only good for us, but good for our patrons and suffering humanity that we were here.

HALL, COMMITTEE ROOMS, RAILROADS, &C.

Your Committee beg leave to submit the following report:

The proprietors of the Put-in-Bay House with their usual liberality, have given us the use of this hall, and such rooms as will be required for committees, free of charge.

The necessary stationary, ink and pens have been provided for the use of the society.

Knowing from past experience that we could expect no special favors from railroad companies, your Committee thought best ro ask none, but that members asking for excursion tickets to Put-in-Bay and return, would be furnished them at reduced rates as all others are.

ORDER OF BUSINESS.

Your Committee would recommend the same order of business as was adopted last year, viz:

The meeting for daily sessions shall be at 9 A. M. and 2 P. M.

The order of business for each daily session shall be as follows:

1. Reading the minutes of the previous session.
2. Report of committee on admissions and election of new members.
3. Reports from officers of the Society.
4. Unfinished business that has not been made a special order.
5. Reports of standing committees.
6. Reports from special committees.
7. Volunteer papers.
8. Miscellaneous business.

The election of officers shall be made a special order for 2 o'clock P. M. Wednesday.

The address of the President shall be made a special order for 3 o'clock P. M., or immediately after the election of officers.

The evenings can be devoted to social re-unions or public lectures—as may best suit the convenience and inclination of the members present.

All of which is respectfully submitted.

H. J. DONAHOE,
Chairman Executive Committee.

On motion the report was *adopted.*

REPORTS OF OFFICERS AND COMMITTEES CALLED FOR.

The President called for reports from the officers of the Society, but none were found ready to report. Reports from committees, both special and standing were then called for, when a number signified their readiness to report at the pleasure of the Society.

REPORT FROM SPECIAL COMMITTEE—ANTI-PYRETIC POWERS OF QUININE.

Dr. T. W. Gordon read a long and interesting report on the above subject. The report gave rise to an interesting and animated discussion which was participated in by a number of the gentlemen present. Embodied in the paper was the report of a number of interesting cases illustrating the action of quinine when given in large doses to patients suffering with high fever and bounding pulse. (The discussion on this report will be found in connection with the paper in another part of the book.

FILLING UP COMMITTEES.

Dr. Forbes moved that the Advisory Committee on Publication be filled to its required number, so the committee could proceed to business. *Carried.*

The committee was then filled to consist of the following members:

W. W. Jones, Ch., S. F. Forbes, S. S. Thorn, B. B. Leonard, T. A. Reamy, D. D. Bramble, A. Dunlap, J. B. Thompson, A. N. Read, Wm. Moore, A. H. Donahoe, J. L. Wilson.

EMPLOYMENT OF REPORTER.

Dr. W. W. Jones moved that a short-hand reporter be employed to report the discussions of this meeting. After much discussion pro and con, the motion prevailed, but the reporter was not employed, the reporting of discussions being left to the secretary.

REPORT FROM COMMITTEE ON ADMISSIONS.

List of New Members.

The committee on admissions reported the following named gentlemen for membership, who were on motion elected members of the society:

H. C. Howard, Akron, E. A. Steely, Anna, G. P. Stewart, S. C. Ayers, Cincinnati, H. D. Chamberlin, Toledo.

LIST OF DELEGATES ADMITTED.

H. C. Howard and W. S. Hough, delegates from Union Medical Association of North-Eastern Ohio.

H. S. Hough and H. C. Howard delegates from Summit County Medical Society.

L. T. Guerin, delegate from the Columbus Academy of Medicine.

James H. Pooley, delegate from Central Ohio Medical Association.

John M. Cox, delegate from the Ross County Medical Society.

S. C. Ayers, M. D., delegate, Academy of Medicine, Cincinnati.

T. H. Stewart, M. D., delegate from Trumbull County Medical Society.

H. D. Chamberlain, delegate, Toledo Medical Association.

Dr. W. M. Dixon, delegate, Summit County Medical Society.

REPORT FROM COMMITTEE ON OBITUARIES.

Dr. B. B. Leonard presented a report on obituaries which, on motion, was received, and referred to committee on publication.

Dr. J. H. Pooley by request, read an exceedingly able and interesting obituary of the late Dr. Awl, who was

an honorary member of this society. Dr. Pooley stated that his paper was not complete, and by permission of the society he would like the privilege of completing it before handing it to the publication committee. On motion of Dr. Jones, Dr. Pooley's request was granted.

REMARKS ON LIFE AND CHARACTER OF DR. AWL.

Dr. W. W. Jones said we should thank the gentleman for the able and interesting report, respecting the life of so eminent a man and physician as Dr. Awl. He was a great and good man and an eminent surgeon. He performed in an early day, an operation which, owing to its magnitude and importance, but very few, if any, of the surgeons of the civilized world would at that time have undertaken. It is to him that we are largely indebted for the establishing of our public institutions, for the care of our insane, and for the good management of those institutions, both internally and externally. Owing to political changes constantly recurring he was displaced from positions which for the good of the State and the eminent services rendered, he should have held until relieved by death. For the good he had rendered society he should have been made comfortable while living. But instead, he was reduced to extremity for a livelihood in his later life. He deserved better things, for he was a good and a great man and physician, and gave much of his time and talents to the amelioration of the suffering and unfortunate of society generally, as well as in his immediate vicinity. And as he is gone and beyond our physical aid or assistance, let us emulate his virtues, and pay his memory that homage due so great and good a character.

Dr. Thompson being called on remarked that after what had been said he did not think he could add anything. He knew Dr. Awl well and favorably, and thought he was entitled to all that was said.

The President said he should embrace this opportunity to add his testimony to the high and eminent character of Dr. Awl, both as a man and physician. Dr. Awl was, emphatically and positively, the friend of the young physician. He had taken *him* by the hand and encouraged him when he was young and needed such recognition and support.

To illustrate his liberality toward young physicians:— He was in the habit of telling the people that they could not get a better doctor than Dr. Scott. This, the speaker always accepted as a compliment, for which he felt grateful, and while he looked upon the statement as an exaggeration he took it as an earnest of Dr. Awl's disposition to help and assist the young physician in his struggles for preferment and professional favor.

Dr. Awl also possessed a vein of humor to a degree that rendered him an agreeable companion at all times. The speaker related an anecdote of Dr. Awl to illustrate this phase of his character.

FILLING UP COMMITTEES.

The Committee on Medical Societies was filled up by appointing thereon Drs. E. B. Pratt, and T. C. Miller.

PAPERS ANNOUNCED.

Dr. Forbes was announced to read a paper on "Railroad Injuries."

Dr. Muscroft a paper on the "Prevention of the spread of Syphilis."

Adjourned.

SECOND DAY.

MORNING SESSION—9 O'CLOCK A. M.

President Dr. Scott in the Chair. Minutes of the previous day read, and after a few minor corrections, *adopted.*

Dr. Harmon said the article referred to—in the debate on Dr. Gordon's paper—as published in the Louisville Medical Journal in 1852 or 1853, was the same as a short treatise published in 1780 or 1790, on "Peruvian Bark." He made this correction as a matter of history.

ANNOUNCEMENT OF PAPERS.

Dr. Ayers announced his readiness to read a volunteer paper on "Paracenticis of the Cornea."

Dr. A. Dunlap announced a volunteer paper on "Fibroids of the Uterus and their management," which he would report for discussion but not for publication, at the pleasure of the Society.

Dr. Morris announced a paper on "Hydrate of Chloral as a Remedial Agent in Puerperal Convulsions."

INDULGENCIES ASKED.

Dr. Hyatt wished to be continued one year longer, in making his report on "Pathology of Albuminuria." *Granted.*

Dr. Reamy also wished to be continued in making his report on "Gynaecology," for one year, as his report was not in a condition to be presented to the society at present. *Granted.*

REPORT FROM COMMITTEE ON MEDICAL SOCIETIES.

The Committee on Medical Societies reported favorably on the following associations becoming auxiliary societies:

Columbus Pathological Society.
Putnam Medical Society.
Clark County Medical Society.
Brown County Medical Society.
Erie County Medical Society.
Logan County Medical Society.
Lawrence County Medical Society.
Brown County Academy of Medicine.

SPECIAL COMMITTEES CONTINUED.

Dr. Miles asked to be continued one year in making his report on "Forceps in Breech Delivery. *Granted.*

Drs. Connor and Black also were continued one year in making their reports.

TELEGRAPHING FOR RATES OF FARE.

It was moved that the secretary be required to telegraph to Dayton and ascertain the rates of fare that would be charged the members, per day, at their hotels, in the event the society should hold its next meeting there.

Dr. Donahoe offered an amendment that Zanesville and Springfield be telegraphed to also, but withdrew his amendment. After some discussion the motion was laid on the table.

PROTESTS AGAINST FURTHER MEETINGS AT PUT-IN-BAY.

A number of letters were read from members and local societies in different parts of the State, protesting against the further meeting of the Society at Put-in-Bay.

Dr. Jones moved these protests be laid on the table. *Carried.*

SECRETARY'S REPORT.

The Secretary made the following report:

OHIO STATE MEDICAL SOCIETY,

To J. W. HADLOCK, Dr.

For Postage from June 20, 1876, to June 12, 1877	$3 00
For Postal Card circulars and Printing, (669)	8 19
Total	$11 19

REPORT OF TREASURER AND LIBRARIAN.

Dr. S. S. Gray Treasurer and Librarian reported as follows:

TREASURER—Amount collected ending June 1877	$663 42
" Disbursed " "	523 79
Balance in Treasury	$139 63

LIBRARIAN—Number of Volumes in Library past year	1,937
" " Disbursed	688
" " in Library at present	1,249

Dr. Thompson moved the reports just made be referred to the Finance Committee. *Carried.*

FINANCE COMMITTEE FILLED UP.

The Committee on Finance was filled to its required number by appointing the following as members of the committee:—J. C. Hubbard, W. H. Phillips, D. D. Bramble, E. H. Hyatt.

REPORT FROM COMMITTEE ON ADMISSIONS.

NEW MEMBERS—Charles A. Hart, Marietta; John M. Cox, South Salem.

DELEGATES—J. B. Thompson, J. W. Hamilton, J. F. Baldwin, Columbus Pathological Society; H. C. Brison, Hocking Valley Medical Society; E. C. Lewis, Tuscara-

was Medical Society; A. N. Reed, Union Medical Association of North-Eastern Ohio; N. L. Osborn, Delamater Medical Society of Norwalk and vicinity; E. Vanatta, J. G. F. Holston, J. K. Larzelers, H. M. Creary, J. Jorden, A. E. Bell.

ALTERNATES—G. M. Welder, C. P. King, A. Day, J. W. Chisholm, L. M. Reamey, J. Galanay, all of Zanesville Academy of Medicine; J. E. Woodbridge, Mahoning County Medical Society. *Report adopted.*

REPORT FROM SPECIAL COMMITTEE.

Dr. S. S. Gray read an able and interesting report on "Milksickness," which after a few remarks by Dr. Pooley, was referred to the Advisory Committee on Publication.

DR. POOLEY'S REMARKS.

Dr. Pooley had never seen a case and thought he knew less of the subject than any one else present. He thought the undiscovered plant, supposed to produce the disease, would be found to be one of the fungi, as shown by the similarity between the apparent development of this poison in fields and what we know of the growth of these fungi.

VOLUNTEER PAPER.

Dr. Forbes read a paper on "Manipulations in the reduction of Dislocations." This paper gave rise to quite a lengthy and a very interesting discussion, which will be found printed in connection with the paper in another part of the volume.

RESOLUTIONS INTRODUCED AND PASSED.

Dr. W. W. Jones introduced the following:

Resolved, That it shall be the duty of each auxiliary society to make an annual report to this body, which report shall embrace the following facts, viz:

1. Names of officers and members.
2. Number of meetings during the year.
3. Title of papers or reports read before them, with the authors names.
4. Mortality, removal, withdrawals and expulsions among its membership.

Dr. T. W. Gordon then introduced a resolution amended to read as follows:

Resolved, That a committee of three be appointed by the President to codify all rules, resolutions and amendments to by-laws governing this society; and that said committee be requested to have their report ready to present to the society at its next annual meeting, together with such suggestions as it may think proper to offer.

This resolution was passed when Dr. Jones moved that his resolution be referred to that committee. *Carried.*

Dr. Lewis offered the following resolution, which, on motion of Dr. Jones, was referred to the Judicial Council:

Resolved, That the delegate from Tuscarawas County Medical Society to the State Medical Society, be and is instructed to use his efforts in bringing to the notice of the State Medical Society, the present status of the medical profession of the State in the matter of prosecutors for mal-practice, and to take some measures to procure a change in the better protection of the profession.

CODIFYING COMMITTEE.

The President announced the Committee to codify resolutions, motions, amendments, &c., as follows:

T. W. Gordon, S. S. Gray, J. W. Hadlock.

REPORT FROM COMMITTEE ON ADMISSIONS.

The Committee on Admissions reported as follows:

NEW MEMBERS—T. E. Paul, Ottawa; M. M. Dickson, Johnstown; S. C. Dunun, Cheshire; A. L. Wangaman,

Tiffin; A. W. Bell, Bloomsville; Geo. Martin, Huron; C. C. Hixson, Hillsborough; A. Hughes, Sandusky; E. A. McNutt, Huron.

DELEGATES—B. B. Loughhead, Portage Co. Medical Society; J. Bennett, L. Burtin, J. M. Hines, X. C. Scott, L. Lowman, delegates from Cuyahoga Co. Medical Society.

Adjourned.

SECOND DAY.

AFTERNOON SESSION—1½ O'CLOCK, P. M.

VOLUNTEER PAPER.

Dr. A. Dunlap read his paper on "The Treatment of Fibroids of the Uterus." He advised letting alone interstitial and sub-peritoneal tumors, until their size should interfere with the patients health, when he would remove by abdominal section, drawing the peritoneal edges of the uterine wound together by means of sutures passed through the uterine cavity, and out at the vulva. He would remove intra-uterine fibroids with the ecraseur.

ELECTION OF OFFICERS.

The election of officers for the ensuing year resulted as follows:

DR. H. W. PHILIPS, Kenton, *President.*

S. F. FORBES, Toledo,
C. S. MUSCROFT, Cincinnati,
J. C. HUBBARD, Ashtabula,
A. N. REED, Norwalk,
} *Vice-Presidents.*

S. S. GRAY, Piqua, *Treasurer and Librarian.*

J. W. HADLOCK, Cincinnati, *Secretary.*

J. F. BALDWIN, Columbus, *Assistant Secretary.*

E. B. PRATT, Mt. Sterling,
J. H. DONAHOE, Sandusky,
B. F. HART, Marietta,
C. E. BEARDSLEY, Ottawa,
CHAS. DUNLAP, Springfield. } *Com. on Admissions.*

PLACE OF MEETING SELECTED.

Dr. J. H. Pooley in a few neat and appropriate remarks invited the Society to hold its next annual meeting in the city of Columbus. After some discussion in favor of other points it was decided by a vote of 41 to 9 that the Society hold its next annual meeting in the city of Columbus, beginning on the second Tuesday in May, at two o'clock P. M., 1878.

PRESIDENT'S ADDRESS.

The President read an able and interesting address in which he took ground in favor of a more thorough organization of the profession into local societies, for combined effort, to bring about reforms in many ways, and to secure a more thorough medical education by the colleges.

Many other suggestions were thrown out of a practical value, and a committee suggested or recommended to be appointed to consider the suggestions made. Paper referred to advisory Committee on Publication.

Dr. X. C. Scott moved that a committee be appointed to carry out the suggestions made in the President's Address, as follows:

Resolved, That a committee of five be appointed to consider and report at the next annual meeting on the suggestions contained in the present President's address.

Further, That the author of any paper to be read before the next annual meeting, must send its title six weeks in advance of the meeting, to the Secretary of this Society, and that it shall be the duty of the Secretary to send a printed

notice of all such papers to every member of this Society one month previous to its meeting. Volunteer papers to be read after the announced papers have been disposed of. *Carried.*

The President appointed the Committee as follows:

X. C. Scott, J. H. Pooley, T. C. Miller, E. H. Hyatt, J. F. Baldwin.

DISCUSSION ON DR. DUNLAP'S PAPER.

Dr. Pooley wanted to know whether ergot might not act on the tissues of the fibroid tumor itself.

Dr. Dunlap did not think any absorbents existed in the sac to carry away the material of the tumor. He cited cases where involution following delivery was not followed by any diminution in the size of the tumor.

Dr. Hyatt wanted to know in how many cases and in what doses he had used ergot.

Dr. Dunlap said he could not tell in how many cases he had used it, but he used it in as large doses as the patient could bear.

Dr. Hyatt thought that the doses of ergot should be repeated at frequent intervals in order to keep up the contraction of the uterine fibers. Thought that absorption could take place wherever there was circulation.

Dr. Harmon inquired if Dr. Dunlap had ever used the protoiodide of mercury in these cases.

Dr. Dunlap replied that he had never used it internally, nor had he ever derived any good from its external use.

REPORT FROM PUBLICATION COMMITTEE.

Dr. Baldwin, Assistant Secretary, read the report of the Publication Committee.

On motion the report was referred to the Committee on Finance.

VOLUNTEER PAPER.

Dr. Ayers, of Cincinnati, read a paper on "Paraceuticis of the Cornea."

After some remarks by Drs. Noris, Ayers and others, the paper was referred to the Advisory Committee on Publication.

Dr. J. H. Pooley read a volunteer paper on "Perityphlitic Abscess. The paper was able and showed signs of great care and research in its preparation.

Dr. Jones said he had had such cases and was always fearful when cutting into them. He was glad the gentleman had taken the pains and care to prepare such a paper for us.

Referred to Advisory Committee on Publication.

AMENDMENTS TO CONSTITUTION AND BY-LAWS PROPOSED.

Dr. Baldwin offered the following amendments, which, under the rules, went over for one year:

To amend Sec. 4, Art. IV, of By-Laws, so that it shall read: "These By-Laws may be suspended, repealed, or amended by a four-fifth vote at any regular meeting."

Move to amend Art. VIII. of the Constitution by striking out the words "subsequent to one at which a proposition to that effect may have been made in writing."

Adjourned until 8 o'clock, P. M.

SECOND DAY.

EVENING SESSION.—8 O'CLOCK, P. M.

VOLUNTEER PAPER.

Dr. X. C. Scott, of Cleveland, read a paper on "Diseases of the Eye." Referred to the Advisory Committee on Publication. *Adjourned.*

THIRD DAY.

MORNING SESSION.—9 O'CLOCK, A. M.

Dr. Nolen, Vice President, in the chair. Minutes of the previous day read and approved.

Dr. J. Bennett was continued a special committee on "Malaria."

STRICKEN FROM THE LIST OF ESSAYISTS.

Drs. Hough and Clendenin failing to report in any way, were, on motion of Dr. Jones, stricken from the roll of essayists.

VOLUNTEER PAPER.

Dr. Muscroft read a volunteer paper on the "Prevention of the spread of Syphilis."

This paper gave rise to quite a discussion, which will be found printed in connection with the paper in another part of the book.

LOCAL SOCIETIES ADMITTED AS AUXILIARIES.

Dr. Thorn moved that the Highland Co. Medical Society of Hillsboro, and the Wood Co. Medical Society of Bowling Green, be admitted as auxiliaries. *Carried.*

REPORT OF THE FINANCE COMMITTEE.

Dr. D. D. Bramble, secretary of the committee, made the report of the finance committee as follows:

Having examined the accounts and vouchers of the Treasurer, we find them correct.

Whole amount received during year, ...	$663 42
Whole amount of disbursements, ...	$523 79
Balance in Treasury, ...	$139 63

A bill of extras, made by publishers, for changing copy by authors, amounting to $36.00, having appeared as part of the report of the publication committee, the finance committee recommended the adoption of the following resolution:

Resolved, That the amounts so paid, and all like charges now, and in the future, shall be refunded to the society by the parties for whom such expenses are incurred. It was further

Resolved, That the Treasurer shall procure a suitable book for the correct entry of his accounts with the society in disbursement of society funds in detail whereby it may be a permanent record, as the ledger containing accounts with members, will only last the current year. Therefore

Resolved, That the finance committee be empowered to procure a suitable book for said purpose and employ a competent accountant to transfer all unsettled accounts with members, and report the amount due the society on said delinquencies at the next annual meeting.

An assessment of $2.00 from each member is recommended for the coming year.

C. E. BEARDSLEY, Chairman.
J. C. HUBBARD,
E. H. HYATT,
W. H. PHILLIPS,
D. D. BRAMBLE, Secretary.

After some discussion the report was *adopted*.

SECRETARIES COMPENSATION INCREASED.

Dr. Thorn moved that the compensation of the secretary hereafter be $75 a year instead of $50, and that the assistant secretary be paid his legitimate expenses while in attendance upon the meeting of the society.

Dr. W. W. Jones, of Toledo, objected to paying the secretary any more salary. He argued that compensation could not be increased after election of officers had taken place. Others argued that as it was not a regular salary, but a compensation, voted every year for services rendered, it could be increased or diminished at the pleasure of the society. The motion being put to a vote, was carried quite unanimously.

REPORT FROM COMMITTEE ON ADMISSIONS.

New Member.—J. W. McCracken, Portage, Wood Co., Ohio.

Delegate.—P. P. Pomerine, Holmes Co. Medical Society.

DISCUSSION OF DR. X. C. SCOTT'S PAPER.

Dr. Jones said, when he began the practice of medicine thirty years ago, he adopted the antiflogistic treatment, using cold water, calomel, etc., etc., and he had never seen cause to regret the course of treatment adopted, for he had never yet lost an eye by resorting to and faithfully carrying out such treatment.

Dr. Ayers thinks it beneficial to babes to have them brought out into the fresh air when the eyes are inflamed, and he therefore has his patients brought to him at his office. There is one point that should be borne in mind in all these cases, and that is, that the well eye is liable to become affected through sympathy with the diseased eye. Many a good eye is lost in this way. The well eye should be hermetically sealed until the purulent discharge ceases from the inflamed eye. Another point

he would call attention to as being pregnant with danger, is, the indiscriminate use of strong caustic solutions in ophthalmia in children. Much harm, he is persuaded, is unintentionally done by the general practitioner in thus using these solutions and not taking care to wash them away, after use, with clean water.

Dr. Norris thinks the strong solutions should not be generally used, at any rate not carelessly and indiscriminately used. He thinks it often the fault of the doctor that infants have to suffer from purulent ophthalmia, beginning at birth. When the child is born it is handed over to the nurse without even being looked at by the attending physician. It should be looked at. It should be seen that there is nothing the matter with the eyes. That they are clean of the fluids escaping at time of birth, and if they are not clean they should be cleansed at once. Too much attention is generally shown the mother to the neglect of the child. His advise to all would be "go slow with strong solutions." better use milder lotions and trust to nature.

Dr. Chapman said he used a solution of nitrate of silver of twenty grains strength in conjunctivitis, and then washed off the surface with water, using a soft camel hair brush.

Dr. X. C. Scott said he never used so strong a solution.

* * * (In this dicussion we did not get the remarks of Dr. Pooley sufficiently to produce them here, our attention being called to another matter whilst he was speaking, and we omit them entire fearing we might do the Doctor injustice.—SEC'Y.)

ASSISTANT SECRETARY PROVIDED FOR.

Dr. Pooley moved that the compensation of the Assistant Secretary, as provided for by the resolution of Dr. Thorn, apply to the current year. *Carried.*

Committee on Admissions reported in favor of R. C. Russ for membership. *Elected.*

INTRODUCING THE PRESIDENT ELECT.

The retiring President in a few well chosen words formally introduced the President elect to the Society, presenting to him his badge of office, the gavel.

Dr. Phillips, the President elect, replied in as equally a felicitous manner.

PAPERS READ BY TITLE.

Dr. Bramble moved that the paper of Dr. Morris on "Chloral in Puerperal Convulsions," be read by title and referred to the Advisory Committee on Publication. *Carried.*

RESOLUTIONS REGULATING DOCTORS' FEES WHEN TESTIFYING BEFORE COURTS.

Dr. Phillips introduced the following:

WHEREAS, It has become a very prevalent custom throughout the several counties of this State of Ohio, to subpœnae physicians and surgeons to give testimony as experts in Courts of Law, and

WHEREAS, There does not appear to be any provision upon our statute books to make proper compensation for such services, therefore

Resolved, First, that we hold that our professional opinions are our own—often obtained by great labor and expense, and if considered of value to the State or to parties in civil actions, ought to be paid for.

Resolved, Second, That a Committee of three be appointed to investigate and obtain the legal facts pertaining to this subject, and report at the next meeting of the Society, and recommend a plan of action.

REMARKS.

Dr. Nolen strongly favored the resolution. He had taken this position long since himself, and he did not and would not go to Court and testify unless paid the fee he demanded.

Dr. Phillips said there is a nice distinction physicians as experts should make right here. They should not testify under the impression that they are doing it for money, for money often would not compensate for the value of their testimony to some litigants. Testifying as an expert, he becomes a judicial officer. He is there to instruct judge, jury and counsel. When a physician is called upon to give expert testimony, he should be allowed, at least, the customary fee for consultation in that neighborhood or locality. He would object to making arrangements with litigants to testify, if they would pay him what he thinks is right. That, to him, smacks too much like selling his opinions as an expert.

Dr. Waddell. It is often the case that physicians are arrayed against each other, and in that way their testimony is destroyed on matters of science, until they become a by-word and are sneered at amongst attorneys. Physicians are often tricked into becoming partizans of litigants before they are aware of it. It is the custom of those who are disposed to annoy doctors with suits at mal-practice to go about showing their ailments and getting the opinions of unsuspecting doctors, and before they are aware of what has been going on they are called upon to testify in a suit for mal-practice, and their former opinion casually expressed, often given without an examination is arrayed before them; for the supposed injured man had taken his witnesses with him in hunting up the opinions of doctors, and every statement is carefully noted down for future use. He related a case of that character which had occurred in his city, Toledo, where a prominent young surgeon had treated a case of Colles fracture. The man had gone and in a casual way had gotten the opinion of a number of doctors as

to the result—which was good under the circumstances, for the case possessed some peculiar features—and when they, the doctors, found how they had been tricked, the ingrate was headed off by being sued for the bill, and the surgeon getting a unanimous opinion as to the good result of the case.

Dr. Pooley. The trouble in this matter is as to just what the physician's testimony is worth in a given case. There is no doubt of its being worth more in some cases than in others. He had a lawyer tell him that his testimony was worth to his client, in one special case, $500, and yet he was not paid anything. In one case he refused to testify until he was paid for his testimony. He appealed to the Court, and the Court had arrangements made for him to be paid his fee, $25, and he considered that poor pay for the services rendered. In testifying where we have an arrangement for increased compensation, we will become advocates for the side on which we testify, if we are not cautious. We should never lose sight of the fact that we are to but give the judge and jury the benefit of our scientific knowledge on a given point, or series of points. The attorney on the other side will be quick to detect any partizan feeling on our part, and it is well he does, for he helps us, and keeps us from doing ourselves harm. He is not in favor of taking any such paltry sum as the ordinary consultation fee, as expressed by Dr. Philips, (Dr. Philips here interrupted the speaker by saying that he did not think that justice in all cases, but it was about as much as we could expect, from the manner in which the Ohio State Legislature treated the subject last winter.) Dr. Pooley continuing, said, the Ohio Legislature had not been elevated in his estimation by the last remark of Dr. Philips, such testimony as we should give on those occasions, should be paid for well, for we should not, when testifying as experts, be content with giving the opinion of this author, or that author, or half a dozen of them—our testimony should

be of a higher order–it should be based upon the combined and established knowledge of the science of medicine throughout the civilized world, at the time it is given. We should not be content as experts, in testifying to what the medical profession knows on a given point, in the locality where we testify or reside, but we should be able to give, on the points testified to, all that is known, all that is established—the recognized views and doctrines of the medical and scientific world. That is the kind of testimony we should give and it is for that kind we should demand pay commensurate with the information given or elicited.

After some further discussion the resolution was put to a vote and *carried.*

The committee, as recommended in the resolution, was appointed. See list of committees.

RESOLUTION PROTECTING PHYSICIANS FROM SUITS OF MAL-PRACTICE.

Dr. Pooley introduced the following:

Resolved, That the committee of three, already appointed, to inquire into the rights of expert witnesses, be instructed to report at the next meeting of this society, a draft of a bill for approval for the protection of physicians in suits of mal-practice.

After some remarks it was thought best to have a separate committee to carry out the objects of this resolution. A committee was therefore appointed for that purpose.

COMMITTEES.—STANDING AND SPECIAL.

STANDING COMMITTEES.

Advisory Committee on Publication.

CLEVELAND.	CINCINNATI.
H. J. Herrick,	John A. Murphy,
John Bennett,	T. A. Reamy,
John Lomas,	D. D. Bramble.

TOLEDO.	COLUMBUS.
S. S. Thorn,	Wm. H. Drury,
W. W. Jones,	R. Gundry,
J. G. Nolan.	J. F. Baldwin.

Executive Committee.

J. B. Thompson, Columbus.
C. P. Landon, Westerville.
R. M. Denig, Columbus.
N. Gay, Columbus.
F. W. Jones, Columbus.

Committee on Publication.

W. B. Davis, (resigned) C. S. Muscroft,
P. S. Conner, (resigned) J. W. Hadlock,
T. W. Gordon.

Committee on Medical Societies.

S. B. Hinor, P. M. Wagenhalls,
F. J. Weed, Enoch Pearce, Jr.
H. S. Conklin.

Committee on Obituaries.

B. B. Leonard, West Liberty.

Committee to Memorialize Congress on Catalogue.

1—W. W. Dawson, Cincinnati.
2—M. B. Wright, Cincinnati.
3—N. H. Sidwell, Wilmington.
4—Clark McDermot, Dayton.
5—C. Beardsley, Ottowa.
6—W. W. Jones, Toledo.
7—G. S. Franklin, Chillicothe.
8—H. W. Phillips, Kenton.
9—T. B. Williams, Delaware.
10—E. Stanley, Sandusky.
11—W. F. Wilson, Ironton.
12—Jesse Thompson, Bloomfield.
13—Howard Culbertson, Zanesville.
14—Benj. Meyers, Ashland.
15—Richard Gundry, Athens.
16—W. S. Fisher, Bridgeport.
17—T. Woodbridge, Youngstown.
18—J. D. Robinson, Wooster.
19—D. B. Wood, Warren.
20—J. C. E. Weber, Cleveland.

Judicial Council.

W. T. Ridenour, W. H. Mussey,
A. T. Keyt, John Bennett,
J. H. Pooley, W. J. Conklin,
Thos. G. McE'Bright.

Committee on Finance.

D. D. Bramble, Chairman. J. C. Hubberd,
C. E. Beardsley, E. H. Hyatt,
A. J. Miles.

Committee to Codify Resolutions, Motions, Amendments, etc.

T. W. Gordon. S. S. Gray. J. W. Hadlock.

Committee to Consider the Suggestions of President's Address.

X. C. Scott, J. H. Pooley,
T. C. Miller, E. H. Hyatt,
J. F. Baldwin.

Committee on Regulating Compensation for Testifying as Experts.

W. H. Philips. Geo. O. Butler. C. P. Landon.

Committee on Protecting Physicians from Suits for Mal-practice.

J. H. Pooley, J. F. Baldwin, P. M. Wagenhalls.

SPECIAL COMMITTEES.

Starting Loving, Progress of Medicine.
B. B. Leonard, Operations in Lythotomy.
A. E. Merrell, Hydrophobia.
D. B. Smith, Progress of Ophthalmology.
E. H. Hyatt, Pathology of Albuminuria.
T. A. Reamy, Gynaecology.
P. S. Conner, Syphilis in its Hygienic Relations.
J. H. Buckner, Influence of Diseases of the Throat on the Ear.
J. R. Black, Atmospheric and Telluric Influence in Etiology.
J. H. Curry, Diseases of the Eye.
A. J. Miles, Forceps in Breech Presentations.
John Bennet, Malaria.
F. Clark Miller, Recent Progress of Obstetrics.
S. F. Forbes, Progress of Surgery during the year.
D. D. Bramble, Treatment and cure of Syphilis.

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

M. C. Cuykendale, Bucyrus; Wm. Buno, Oberlin; Elwood Stanley, Sandusky; John Bennett, Cleveland; T. Clark Miller, Massillon: Frank J. Weed, Cleveland; J. C. Hubbard, Ashtabula; Enoch Pearce, Jr., Steubenville; H. K. Cushing, Cleveland; R. M. Dennig, Columbus; C. P. Landon, Westerville; J. W. Butler, Columbus; J. B. Thompson, Columbus; J. Thompson, Bloomfield; J. G. Nolen, Toledo; C. H. Reed, Toledo; Wm. Cherry, Toledo; James A. Duncon, Toledo; W. C. Chapman, Toledo; John A. Murphy, Cincinnati; C. S. Muscroft, Cincinnati; Wm. H. Mussey, Cincinnati; T. A. Reamy, Cincinnati; W. B. Davis, Cincinnati; J. W. Hadlock, Cincinnati; J. T. Whittier, Cincinnati; W. Bucker, Shelby; E. Williams, Cincinnati; P. S. Conner, Cincinnati; C. G. Comegys, Cincinnati; J. H. Buckner, Cincinnati; Roberts Bartholow, Cincinnati; W. W. Seely, Cincinnati; W. H. Phillips, Kenton; P. P. Pomerine, Berlin; Joel Pomerine, Millersburg; J. J. Quinn, Cincinnati; T. H. Kearney, Cincinnati; A. N. Reed, Norwalk; W. T. Ridenour, Toledo; R. L. Sweeney, Marion; George Mitchell, Mansfield; Jonathan Morris, Ironton; W. A. Musgrove, Urbana; J. H. Ayres, Urbana; W. J. Scott, Cleveland; W. J. Bertolett, Shreve; A. J. Beach, Belleville; J. W. Russell, Mt. Vernon; E. H. Hyatt, Delaware; H. J. Donahoe, Sandusky; Wm. Moore, New Lisbon; W. S. Haugh, Cuyahoga Falls; D. D. Bramble, Cincinnati.

DELEGATES TO STATE MEDICAL SOCIETIES.

Michigan.—Thomas Waddell, S. F. Forbes, A. Dunlap.

Indiana—T. A. Reamy, W. W. Jones, T. W. Gordon.

Kentucky—T. G. Vaughters, D. C. Wilson, J. T. Whittaker.

West Virginia.—J. E. Woodbridge, Enoch Pearce, Jr., Lewis Schwab.

New York State—J. H. Pooley, W. W. Seely, J. N. Hines, W. D. Scarfe, H. C. Pearce, E. Williams, R. R. McIlvaine.

South Carolina—T. W. Gordon, W. H. Mussey, B. F. Hart, J. W. Hadlock, T. A. Reamy.

The Society adjourned at high noon June 14th, 1877, to meet at Columbus the second Tuesday in May, 1878.

W. J. Scott, M. D., President.

J. W. Hadlock, M. D., Secretary.

J. F. Baldwin, M. D., Assistant Secretary.

ANNUAL ADDRESS

— OF THE —

RETIRING PRESIDENT, W. J. SCOTT,

CLEVELAND, OHIO.

ANNUAL ADDRESS

— OF THE —

RETIRING PRESIDENT, W. J. SCOTT, M. D., CLEVELAND, O.

—:o:—

Gentlemen of the Ohio State Medical Society:

Before commencing my address, I wish to make some suggestions which will, as I think, tend to promote the interests of the society and benefit the profession.

It seems to me that if the profession were organized well in local and county societies all over the State, that then this could better be made a representative organization only by delegates from such societies; and that we make a rule, that any person wishing to read a paper before this society, should at least report it by letter to the secretary or executive committee, one month before the time of meeting of this society, so that a programme of business could be made, and sent to each member. In this way, direction of business would be obtained, and point and direction given to the discussion of the subjects of papers.

And whenever the society becomes large enough, that it may be divided into sections. There is no question that a small section will do more and better work than a large promiscuous society.

And very lengthy papers be read by abstract, and referred to the advisory committee for publication. This way saves time to the society, so that all can be satisfactorily heard. I am, from my experience in large organizations, convinced that some such arrangement would greatly promote the common good of this society:

MEDICAL EDUCATION.

As custom requires me, at this time, to address you on some subject connected with medicine, I have concluded to take up one much talked of, which has a peculiar interest, I conceive, to us all, as we all, in one way or another, are more or less connected with it. The subject of Medical Education at the present time, is commanding the attention of all. State Legislatures are passing laws to regulate the practice of medicine within their authority. State societies have adopted rules requiring certain acquirements of students before they shall be received into the offices of their members as such. Our legislature had a bill before it last winter, to appoint a Board of Examiners, before whom the students of the medical schools of the State should come to be passed upon, before receiving a degree as Doctor of Medicine. There is much talk among the medical colleges of changing the mode of giving instruction, and of lengthening the time of instruction, and of requiring three courses instead of two, as heretofore. It is often said that the immunities conferred by our degrees are too easily obtained, and that they are often conferred unworthily. Now let us examine some of these topics more at length. The fact that public attention is now directed to these subjects, shows people are thinking of and discussing them for weal or woe. The radical changes recommended should be well considered in principle and detail before adoption, lest the change work more mischief than good. So far as the student is concerned, I think all who seriously investigate the subject, will conclude that at least every student of medicine should have an academic education. Candidates for the Naval School or Military Academy must stand a tolerably rigid examination before entering these schools. It cannot be said with truth, that medical students can enter upon their studies advantageously with less preliminary education, or that their occupation in after life has less responsi-

bilities connected with it. Now while I say this, I do not mean to say a word in derogation of any man who has entered the profession heretofore and now occupies an honorable position in it. For, indeed, I know from personal observation, that our profession to-day, in this country, as a whole, will compare favorably with that of any nation on the globe. Our Blackman, Barker, Hamilton, Gross, and Flint, stand in the front ranks and are the peers of any men of equal number, of whatever nationality. The men recently called into the service of their country, on both sides of the line, did a work, which to-day challenges a comparison with that of any nation or time. Notwithstanding all this, I think it is honestly expressed that the portals of the profession should be guarded better in the future than they have been in the past. Public sentiment to-day is rightly looking in that direction. The profession is directing its attention to these subjects. But we ought to remember that there may be dangers in the way, that do not always work the common good. The elaborate and onorous systems may not attain the greatest proficiency or utility. In the arts, and in some professions, the greatest theoretical knowledge is of comparative little value, without the practical application acquired by familiarity with manual dexterity obtained by practice. The theoretical chemist and the surgeon without the manual dexterity, loses half his art. So knowledge unapplied is not useful. There are in the country large institutions, with great pretentions, which have not the necessary requirements to make their students practical men. A school of Pharmacy which takes for students young men who have not been workers in stores and pharmacies, wholly unacquainted with the subjects, are graduated as pharmacists in two years, and are, as a class, necessarily incompetent either as prescription clerks or pharmacists, from the fact that they have not the manual dexterity or applied knowledge of their subjects.

The profession, I am glad, is now thinking of the subject of medical education. State societies and legislatures are enacting laws on this subject. The profession is looking to see who shall become members. This activity shows that we are on the eve of having something done in the premises. Colleges are discussing the propriety of making changes in their modes of teaching. They have been for years increasing the number of subjects in their courses so as to keep pace with the advance and activity of special studies in some departments of medicine; so that now, it seems, we are on the eve of a revolution in medical teaching. It would be well that we consider this matter, for we are all interested.

We have too many medical schools; we have no standard of knowledge to which a young man must attain before he becomes a student of medicine. This, I think wrong. It is not so in our army and navy schools. The candidate for these must have a certain amount of knowledge on prescribed subjects, and so it should be in medical education. Is medical education of less importance, or the future responsibilities less weighty or difficult? If there is any fault here in our profession, where does the responsibility rest?

As this business is now managed, the members of the profession are responsible for the correction of most abuses which grow out of inadequate preliminary requirements. But heretofore this subject has not received the attention which its importance demands of the whole profession.

Now also Medical Colleges are proposing radical changes in their manner of teaching, and here also, I conceive that there may be breakers upon which they may founder, if great care is not taken.

Specialism is now demanding a large share of attention. I can see, easily, that such a course may be pursued in the near future as to damage the general profession. Specialists are apt to become enthusiasts, and each regard his

specialty as the important part of a medical education, while in reality it is a small part and should only occupy an inch in the general plain of instruction. I am fearful that, by the present mode in most medical schools, too much time is appropriated to specialties, not that I would limit the members of any of them, or find fault with the cultivation of the thorough knowledge attained in this way. For it is beyond dispute that thoroughness in the fundamental branches must give the only basis of a good education. The subjects of Chemistry, Physiology, Surgery and Medicine; theoretical, historical and clinical Anatomy, Obstetrics and Materia Medica and Therapeutics are the fundamental branches in which the principles of science, Pathology and treatment are included.

It does seem to me that too much of a diversion from these may interfere with the best results in an educational point of view. I would not keep the specialties out of view; but give the cultivators of these opportunity to instill into the mind of the student their enthusiasm, so that afterwards he may take any one of them and cultivate it as thoroughly as possible. But in these times of utilitarianism, we are in danger of forgetting the principles which will give the highest attainments in mental cultivation. I am doubtful that such a re-organization of the plan of instruction as will turn the professor into a pedagogue, will ultimately prove any advantage as an advance movement in education, but if all the specialties are to be thoroughly taught in the time of the student, his time of study should be lengthened. It is proper that the whole profession should give its attention to this subject. Indeed the public has been and is now giving to this subject care and thought in organizing a board of medical examiners for the various medical schools of the State. When the legislature takes this question in hand, it has, in my opinion, transcended its legitimate function, for these institutions have certain charter rights, especially, which must be respected when the attempt is

made to couple with the profession, all kinds of illiterate and one-idea checks which can be found.

If the profession of the State is not satisfied that the colleges of the State are not strict enough in examination, and thorough enough in instruction, let the State Society appoint a committee to attend the examinations, and advise the society as to improvements, if any can be made; and not have the legislature impose some inaugural system on us which will lower rather than elevate the present standard. I am sure that all respectable schools of the State would be glad to have a committee of this Society attend their examinations as a visiting board. It is to the general profession, as yet, we therefore look for improvement in education in some important particulars. While the members of the profession receive the students for instruction they ought to be held responsible for their preliminary qualifications; and I believe that if the attention of medical men and medical societies is directed to this point that some present complaints will cease. It is very evident that there should be some standard of education required of the candidate for admission as a medical student into an office or classes of medical schools for instruction.

No teacher of astronomy would think of taking a student without a knowledge of the elementary branches of mathematics. No teacher of natural sciences would take a student, who had not made some proficiency in a tolerably good education. I need not add examples on this point, all will admit the truth of the argument; yet if there is an evil in this direction, how is it to be corrected? I need only refer to the existence of the evil to have it corrected. In Pennsylvania, the State Society has forbidden its members to take students who have not the necessary preliminary education, and in this way a single State may add its part to correcting an existing evil, and thus the State be compelled to take a position on the right side, in the advance to a better condition of affairs.

My object, gentlemen, in presenting so hackneyed a subject to you for your consideration as this, is on account of its general interest at the present time; and if nothing else is done the profession may profitably discuss these various points at its pleasure.

These are considerations which now interest not only schools of medicine, but the whole profession; and should this society deem it advisable to act on any of these suggestions, it will have my hearty co-operation to the utmost of my ability in any proper and legitimate way. You will see in the journals of the day, that movements on some of these points are in progress in some other States; and I hope that some good may be accomplished by these movements for the advancement of sound learning, and remove the slanders from the profession, if there be such, and correct any abuses which may exist.

ANTIPYRETIC POWERS

— OF —

SULPHATE OF QUININE,

— BY —

THOMAS W. GORDON, M. D.,

GEORGETOWN, O.

ANTIPYRETIC POWERS OF SULPHATE OF QUININE,

— BY —

THOMAS W. GORDON, M. D.,

GEORGETOWN, O.

—:o:—

Mr. President, and Gentlemen, Members of the Ohio State Medical Society:

Until the late arrival of my copy of the transactions of this society, for 1876, I was not aware of my having been appointed a committee to report at this time on the Antipyretic Powers of Quinine. Since then my time has been taken up by other subjects to such an extent that I can only give a kind of "off-hand" report. It seems to me, however, that little need be said, there being so little disbelief on the subject in the profession generally. I suppose there is no gentleman present who does not believe that sulphate of quinine will control fever heat in all that class of disease known as malarial, though there may be many who would use the medicine with great caution when treating continued or typhoid cases. Yet the experience of many investigators would seem to prove, almost beyond doubt, its efficacy in the latter type.

Perhaps I can as well place before you my experience and range of investigation on this subject, by quoting from an essay on fever, which I had the honor of delivering before the Brown County Academy of Medicine, in the Spring of 1876, as in any other way. That paper elicited extensive discussion, as it gave a careful history of various types of fever, their etiology, pathology, and treatment, together with various changes in nosology, etc., etc.

The theory advanced that sulphate of quinia would, in large doses, control the fever heat in cases of continued, typhoid, and typhus fever, was put to the test, by at least one member of the Academy, in several cases of typhoid fever. He presented me with a detailed statement of four of his cases, some of which I will present in syreoptical form before closing this report.

The first quotation I make from the essay is as follows: "All experiments prove that high temperature affects the functions of the brain, and that there is, under ordinary circumstances, a direct relation between the amount of cerebral disturbance, and the degree of continued heat. Elevated temperature produces paralysis of the brain, as it does of the heart."

This is readily proven in cases of thermic fever or "sun stroke." I have a few cases in my mind which go to prove the effect produced by the heat, and also the benefit of treatment where large doses of sulphate of quinia were administered.

On the 2d day of July, 1863, I saw seven men who fell to the earth by sunstroke. We were marching from near Hillsboro, Tenn., to Pelham; the last five miles most of the time in line of battle. We were marching down a slight incline toward Elk River, along the border of which there was a dense growth of timber, so dense that no breeze from the stream reached us. The air seemed absolutely dead; the sun was fairly blazing down upon us. Our line of march was frequently through fields of wheat and rye, a portion had been cut, but the greater part was standing.

The intense heat of a July sun, in a southern latitude, on a perfectly clear day, was greatly increased by being reflected into our faces from the yellowish straw. Our position was almost enclosed by the Cumberland mountains, there being only a gap where we entered, and others where the river entered and where it left the valley. The

enemy occupied our front and was posted in the timber, upon which we were moving in solid phalanx, in open field against a hidden foe. The heat seemed almost suffocating; I never experienced such a sense of utter prostration from its effect at any other time in my life. Within about three-fourths of a mile, six soldiers of the line and the adjutant of the 97th Regiment, O. V. I., fell suddenly to the earth.

I saw each one almost immediately after the attack; saw some of them as they fell. On examination I found them insensible; pulse soft and weak but excessively rapid. I applied cold water in douche to their heads, and where a sufficient quantity could be obtained, had it also dashed upon the thorax. Administered whisky immediately, and as soon as possible, gave to each one from thirty to fifty grains of sulphate of quinia. In some of the cases the quinia was continued for a day or two, one large dose each day. All recovered so as to be able to march on the 4th, or to be taken with us without detriment. I believe only two required assistance. As far as I know, only one of the men was afterward afflicted in any way that could possibly be attributed to sunstroke.

I have mentioned these cases because they elucidate the effect of heat upon the brain and heart, and also exhibit the plan of treatment which proved most satisfactory. Like other investigators, in my experience I have found no article of the Materia Medica so certain to control fever heat as is the sulphate of quinia in large doses, although when administered in small or medium doses, it has but little control over temperature, and in health 20 or 25 grs. seldom reduces the temperature more than one degree. All agree that in febrile diseases the fever thermometer must be the guide to determine when the medicine shall be repeated.

Vogt and Wachsmuth were the first in Germany to give large doses of quinia, but the surgeons of the U. S. Army

preceded them many years in giving what were considered by some of the profession, herculean doses. To show some items of my experience with large doses of Sulphate of quinia, I again quote from the essay above mentioned: "Some of you will, no doubt, remember that when I came to this county, some of our physicians and their laical friends, and all the *ic* and *ism* practitioners of the healing art, railed against me for using such large doses of quinia, some of them claiming that I used nothing else. I came here from quite recent fields of investigation, where I had for several years been using those doses of quinia which so astonished and apparently incensed a few of the profession, and all the irregular brood."

I was intimately acquainted with army surgeons who had rolled back the tide of death when malignant or pernicious intermittent, and remittent fevers had been decimating their regiments, before they adopted the use of large doses of quinia. I spent the Autumn of 1840 in the State of Michigan, investigating those fevers and their treatment; where nearly every family was suffering with one or other form of the disease, prevailing in the West. I there used quinia in large doses, and had the gratification of seeing many who had been suffering for weeks, restored to health in a few days, some of them after having taken but two or three doses. I did not wait for a subsidence of the fever before administering the medicine, but by its use caused the fever heat and terrible headache to subside under the cooling action of 15 to 30 grs. of quinia.

I knew that Dr. Kingstone had administered 200 grs. of quinia sulphate in twenty-four hours to a stout negro servant boy of eighteen years in the army of the West near St. Louis, where the patient was suffering from cerebro spinal meningitis, and cured him; where twelve soldiers had died, one after another, in the same camp, of the same disease, under different treatment.

Dr. Daniel Drake in his work on "the principal diseases

of the interior valley of North America," published in 1850, in speaking of the quantitive doses of sulphate of quinia, said:

"Dr. Tilden of Sandusky," (a former president of this society,) "told him that he had given 40 grs. at once; Dr. English of Memphis, Tenn., gave 30 or 40 grs. in four to six hours; Dr. Echols of Selma, Alabama, in anticipation of a paroxysm, took 20 grs. in a single dose; Dr. Boling of Nashville, (who was President of the American Medical Association two years ago,) had given 15 to 20 grs. at once. Assistant Surgeon Holmes, while in Florida had administered 20, 50, and even 80 grs. at once; Surgeon Harvey, whom Dr. Drake styled, "one of the senior, and most authoritive members of the medical staff," has given from 30 to 60 grains, and thinks the larger the portion the better."

Dr. Drake also said: "a man in Cincinnati by *mistake* took two drams of the sulphate without injury. A patient of Dr. Sappington of Memphis, Tenn., who had relapsing fever took 80 grs. at once, iustead of taking it in eight doses as ordered, but was not injured; Dr. Fair of Montgomery, Alabama, told Dr. Drake of a patient who took an ounce in three days and recovered, and Dr. Hiriat of Plaquemine, La., knew an old lady laboring under an algia intermittent, who took 10 grs. every two hours, until an ounce was swallowed." From his own experience, Dr. Drake said, "My own mind inclines to large doses at long intervals."

I do not think I have ever administered a large dose of sulphate of quinia in any febrile case, without a noticeable reduction of temperature; I have taken 20 grs. and made a march of forty miles the same day. It was found these large doses controlled the fever; but the amount of reduction of temperature could not be determined, until the thermometer was brought into use, yet the physician saw plainly that heat was reduced in nearly all, if not all cases, where full doses of quinia were used, yet the modus oper-

andi of the medicine was not known. Nor do we dare to hope that it is now fully known, but we do know that by the aid of the fever thermometer, microscope, sphygmograph, and other appliances and instruments, together with the most careful experiments into physiological action, examination of pathological conditions, and a thorough testing of the action of remedial agents, which have been made in the last few years, a great advance has been made toward a better understanding of hygienic laws, a clearer knowledge of the action of diseases, and to some extent a knowledge of the modus operandi of many remedial agents.

"Leibermeister's experiments with large doses of quinia were made when treating continued fever, and he declared that in large doses it decidedly lowered the temperature. He even claims it is preferable to the cold bath. That if he could use but one of the two means, as an antipyretic, he would choose quinia sulphate."

"Dr. Dundas who practiced medicine for twenty-three years in Bahiea, S. A., said that large and frequent doses of quinia would arrest continued fever, and that typhus fever may be cured by Cinchonism."

Since that was written the medical world has learned that a high temperature, long continued, produces disorganization of tissue. That even external heat will produce paralysis of the heart and brain, notwithstanding the wonderful power of the human body to produce an equable temperature for itself through surface evaporation.

The most thorough investigation into the curative means employed to eradicate fever, have resulted in showing that a reduction of temperature is a reduction of fever. That fever heat is the great destroying agent in all that class of diseased action. Therefore, the remedy which best controls fever heat, is the most effective means of restoring the vital functions to their normal condition.

Knowing this to be true, and that sulphate of quinia will control and cure fever, is it not reasonable to suppose

it cures by its power to reduce fever heat? Whether that heat depends upon morbific matter taken into the system from without, or generated within.

After the essay (from which I have just quoted), was read, before the Brown Co. Academy of Medicine, Dr. A. M. Williamson of Russellville, Ohio, (a member of the Academy) treated several cases of a low type of fever, (Typhoid), four of which he reported to me in detail. He gave from 20 to 50 grs. quinia sulphate at a dose, with the result of reducing temperature, lessening the frequency of the pulse, and increasing its power. To a boy of thirteen years he gave 10 grs. twice a day, afterward 20, 25 and 30 grs. at a time once a day, with marked improvement. The boy was taken sick September 4th, 1876, and discharged October 9th. His temperature ranged most of the time between 103° and 106°. On the 10th of September, his temperature was 105¼°, gave quinia sulphate grs. XXX. On the 11th, his temperature was 103½°. This is a fair sample of the cases. The boy had diarrhea, tymponitic abdomen, hemorrhage from the bowels, petechia, sub-sultus, &c. After the careful examinations and succinct reports of such erudite physicians as Dr. Dundas and Leibermeister, Wachsmuth and Vogt, who are supported by many others, whose reputations for careful, intelligent investigation are held above suspicion, though they be not so widely known as the gentlemen mentioned; can we doubt the beneficial effect of sulphate of quinine as an antipyretic, without a display of self assertion unknown to the careful, intelligent seeker after truth?

DISCUSSION ON DR. GORDON'S PAPER.

From its practical value, this paper gave rise to an animated and interesting discussion.

Dr. Gray related the case of his own little boy, four and a half years old, suffering from an acute attack of croup, to whom he gave 12 grs. of sulphate of quinine, within six hours. The result was profuse perspiration and great general relaxation of the whole system for forty-eight hours.

Dr. Forbes gave to a patient who was suffering from an intense fever, with a pulse ranging from 120 to 140 per minute, 5 gr. doses of sulphate of quinine, with the result of bringing the pulse down to 70 and 80 per minute, followed by profuse perspiration and great general relaxation. He thought as much could be accomplished, however, by giving moderate doses, say from 5 to 10 grs. every two or three hours, as by administering such heroic doses as 20 and 30 grs.

Dr. Gedding remarked, that, perhaps, in the administration of these large doses of quinine, it was the "sulphuric acid" acting on the nerves of organic life which gave rise to a reflex action from the brain and in this way controlled the circulation; producing the prostrating or sedative effects of these large doses of quinine. He did not pretend to *know* this to be a fact, but it is the view that medical men of the South take of the subject, and he threw it out as a suggestion, for what it was worth.

Dr. Reamy said, in reply to this remark, that if the theory suggested by Dr. Gedding be true, why not give the sulphuric acid at once.

Dr. Gedding replied by saying, and by way of explanation, that it was a well known fact that medicines often acted better in combination than when given alone.

Dr. Julien Harmon said that in 1852 or 1853, there

was published in the Louisville Medical Journal a paper in which it was claimed that quinine given in large doses would arrest and control all forms of fever.

This paper was but a reflex of a small pamphlet published in 1780 or 1790 in which the same was claimed for Peruvian Bark. He referred to this as a matter of history only.

Dr. Gordon wishes it to be understood that he does not claim to have said or written anything new. He had simply written his paper, to do his duty to the society, as he had been appointed for that purpose.

His experience had been that quinine will reduce fever and generally cure it, when administered in large doses. He had presented these cases because he knew that Dr. Williamson had observed them closely and critically, and that he had given, in treating them, large doses of quinine.

Dr. Phillips, had given quinine in large doses and found it would control the fever and reduce the pulse both in force and frequency. He believed it to be an antipyretic; but the point, it seemed to him, was, how far can we make this treatment of large doses available. He had always given the large doses where the temperature was high, say from 104° to 106°. He had noticed, where he had given 20 to 30 gr. doses, that within two hours, a reduction of temperature of from one and a half to two degrees followed; and as he continued giving the large doses of quinine, the temperature continued steadily to fall, until from 106° it would come down to 102°, and to 98½°. But the trouble was, if the large doses of quinine were not continued, the temperature would rise again. After the fever was reduced, he had not been so successful in keeping it down, and the question with him was, would it do to continue such treatment? Will it do to administer such doses every day to keep down the pulse and temperature?

If the administration of a few such doses would successfully control the pulse and temperature for forty-eight hours,

then the treatment would have a redeeming feature, and should be advocated and practiced wherever those conditions obtained.

Dr. Pratt said that in view of the well established fact, that long continued high temperature was inimical to life, it became the duty of the physician to be diligent in the application of all means calculated to improve his patients' chances for living, and inasmuch as quinine in large doses did possess the power to reduce temperature in a greater degree than any other drug, it was *the* remedy par excellence for the occasion. Its effects were often prolonged for 36 or 48 hours, but the temperature would gradually rise and eventually reach the point hitherto obtained. It does not, in all probability, cut short the duration of such diseases as typhoid fever, yet its use in large doses, 20 to 40 or even 80 grs. is necessary to bridge the patient over the periods of high temperature above indicated. Its powers are made especially apparent when convalescence commences, when the morning appyrexia becomes well established, then a single large dose given some hours before the occurrence of the oppyrexia, will lengthen it in an appreciable manner, and do much to hasten a return to health. In his locality they had passed through a winter epidemic of typhoid fevers, and he had found that large doses of quinine given every ten or twelve hours acted kindly and hastened convalescence.

Dr. Forbes said he did not find it necessary to give the large doses mentioned in this discussion. He had been able to accomplish the same results as claimed for the large doses alone, by administering moderate doses, and he thought, with more safety and certainly more comfort to the patient. He did not think those heroic doses necessary, at all, to accomplish the desired result.

Dr. Jones said his views, of giving quinine, coincided with those of his friend, Dr. Philips. Dr. Drake, in his great work on the diseases of the Mississippi valley, pub-

lished in 1850, had announced the fact that quinine would reduce fever heat and control and reduce the pulse. He looked upon that as an established fact, and it is the facts we want. We all know what it will do in those cases where indicated, and we want the facts in reference to the manner and time of giving it. There is nothing to be gained, and no use of running off after "sulphuric acid" and the nerves of "organic life;" we want facts as to how and when to give quinine. It will bring down the fever but will not hold it there unless its administration is persisted in.

Dr. Pratt said that persons became habituated to the use of quinine, so that more was required to produce the desired result, citing himself as an example. He thought this fact might explain the different effects noticed by different observers who had reported on the subject.

REPORT ON OBITUARIES,

— BY —

B. B. LEONARD, M. D.,

WEST LIBERTY, O.

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Gentlemen of the Ohio State Medical Society:

Death—insatiate death—still continues his devastating work in our ranks, and during the past year has borne some of our members to his dungeon house, where silence dwells, there to remain as captives until He, at whose girdle hang the keys of death, shall call them back to life.

In preparing the following memoirs, we have not forgotten the maxim, "Nil demortuis nissi verum."

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A. B. JONES, M. D., PORTSMOUTH, OHIO.

Dr. Andrew B. Jones died in the city of Portsmouth, Ohio, on the 15th day of October, 1876, in the 47th year of his age. He was born in Hillsborough, Highland Co., on the 30th day of April, 1829. Having received an academic education in his native town, he commenced the study of medicine in the office of Dr. Telfer, Wilmington, Clinton Co., in 1848, and graduated from the medical college in the city of Columbus in 1850, and began the practice of medicine at Jacksonville, where he remained until April, 1852, when he removed to Portsmouth and became associated with his older brother in the practice of medicine and surgery. At the former place he was married to Miss

Maria Dunbar, who now survives him. He, early after locating in Portsmouth, became prominent as a surgeon, and performed successfully most of the important surgical operations. In June, 1875, he successfully performed the cæsarian operation on a dwarf, thus saving the life of both mother and child. In June, 1872, he was elected president of the Ohio State Medical Society, the duties of which office he performed with entire satisfaction to that body. He was appointed by Governor Allen one of the trustees of the South-Eastern Ohio Hospital for the Insane.

As a delegate of the Ohio State Medical Society, he attended the meeting of the American Medical Association at San Francisco, in the Spring of 1871. Doubtless many will remember him and the pleasant companionship developed on that long journey. He always took a lively interest in medical societies, and it was principally through his efforts that the Scioto County Medical Society was organized. He was for many years its president, and always took the deepest interest in its welfare, and was unremitting in his efforts to make its meetings both interesting and profitable. He was a man of very positive character, of a very sociable nature, and strongly attached to his friends, and this was duly reciprocated by them. He was very generous in extending to the younger members of the profession, not only cheery words, but more substantial aid. He was subject to painful attacks of acute rheumatism, generally confined to the smaller joints. Exposing himself while thus diseased by a long ride, Metastasis to the heart occurred, which proved speedily fatal, and he died without warning. Dr. Cotton, to whom I am indebted for this sketch, informs me that he was a member of the Episcopal Church, and a sincere Christian. "Be ye also ready, for in such an hour as ye think not the Son of Man cometh."

J. S. BAILEY, M. D, FREEPORT, OHIO.

Dr. Joseph Sydenham Bailey was born at Flushing, Belmont Co., Ohio, February 2d, 1830. He was the son of Dr. Jesse Bailey, who survives him, and who was a practicing physician in Flushing for fifty years. He was by birth, and in later years by conviction, a member of the society of *Friends*, and received his preliminary education in the schools under the care of that exemplary class of Christian people. At the age of sixteen years he began the work of school teacher, and continued in that business for ten years, a part of the time at Granville, Ohio. Having studied medicine under his father, he attended lectures in Starling Medical College at Columbus, in 1855. In 1856 he attended lectures in the Miami Medical College in Cincinnati, and graduated in 1857, after which he returned to his native place and began the practice of his profession with his father, and was married September 1st, 1859. During the late war he was one of the surgeons at the hospitals at Camp Chase, near Columbus, Ohio. After his service in the hospital had ended, he returned to Freeport, Harrison Co. Here he soon acquired a good practice and enjoyed the confidence and esteem of the community.

In January, 1875, while in the discharge of his professional duties, his horse took fright and threw him on the frozen ground, which caused such injury to the spine that death ensued on the 29th of August, 1875. Dr. Bailey's faith failed not, and he died leaning on the promises of his loving Saviour, with his head pillowed on the promises of Him who suffers not "a sparrow to fall unnoticed." His end was peace.

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ALEXANDER McBRIDE, M. D., BEREA, O.

Dr. McBride was born in Summit County, Ohio, January 12, 1822, and died in Berea, Ohio, August 5, 1876,

in the fifty-fifth year of his age. He received his preliminary education at Western Reserve College, at Hudson, Ohio. He was graduated in medicine by the Medical College at Cleveland, and received his diploma in the spring of 1847. In 1848 he located in Berea, and remained there until death. Dr. McBride was a close student, and conscientious prescriber, and enjoyed a large and lucrative practice, as well as the confidence of a confiding community. He was a frequent contributor to medical journals, and his articles were meritorious, and gave evidence of profound thought and diligent study. In 1874 his health began to fail, and disease fastened itself upon his vitals with unabated force, and continued its work of destruction until worn out by suffering, he yielded to the great enemy of our race and passed to that "Bourne from which no traveler returneth." His disease was cancer of the stomach. He left two daughters—the only remaining members of his family. Let us commend them to the blessings of "Him who tempers the wind to the shorn lambs."

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STEPHEN H. FARRINGTON, M. D.

Dr. Farrington was born in Winchester, New Hampshire, January 10, 1800, and died in Ashtabula, March 8, 1875. He studied medicine and graduated at Castleton, Vermont, in 1823. Leaving his native State he located in Ashtabula, O., in 1824, and continued the practice of his chosen profession until a few weeks before his death. I am informed by Dr. Hubbard, to whom I am indebted for this sketch, that Dr. Farrington was a thorough scholar, very painstaking and careful, and as a natural result enjoyed the confidence of the people to a remarkable degree. In his work he was self-sacrificing, sympathetic, and conscientious. Considering the backward state of the country at the time Dr. Farrington settled in Ashtabula, it will be conceded

that few medical men were ever called upon to perform more arduous services for any community, than devolved on this resolute and good man. He was truly the friend and good adviser of the poor. He was an honest, independent, and bold thinker on all subjects likely to engage the attention of a thoughtful mind.

In 1848 he was elected a representative to the legislature of Ohio.

In the life of Dr. Farrington we have an example of honesty, faithfulness and capacity, both in the practice of his profession and the councils of the country.

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ELIHU THORN, M. D., YELLOW SPRINGS, O.

Dr. Thorn was born in Oldtown, Green County, Ohio, January 11, 1819, and died in Yellow Springs, Ohio, October 2, 1876, in the fifty-sixth year of his age. He received his medical education in, and graduated at the Medical College in Louisville, Ky., in 1848, and also received a diploma from Starling Medical College at Columbus, Ohio, in 1850, and located in Yellow Springs where he had the confidence of the people and enjoyed a lucrative practice. He became a member of the Ohio State Medical Society in 1867, and continued until the day of his death. Dr. Thorn was reared by parents who were members of the Society of Friends, and embraced the faith of that people, and practiced and inculcated the doctrines, principles and teachings of that kind and faithful brotherhood. For several years Dr. Thorn was in ill health, and as the leaves of autumn fell, he passed the river of death, and to-day we report him as "gone from labors to rewards."

STEPHEN BONNER, M. D.

Died in the City of Cincinnati on the third day of May, 1876. Your committee has been unable to procure a history of this good man, although twice asking for it from a near relative.

From the action taken by the medical profession of that city, in regard to the death of Dr. Bonner, we feel fully assured that he was held in the highest esteem by his professional brethren, and died at a good old age full of honors and good works. He was one of the oldest members of the profession in Cincinnati and enjoyed the confidence of all. He was a good physician; a safe prescriber; a faithful counsellor; an honorable gentleman; a zealous Christian; a *constant friend* of the *poor;* and has gone to reap a reward at the right hand of Him who said, "In as much as ye have done it unto one of the least of my brethren, ye have done it unto me."

MEMOIR OF

WILLIAM MACLAY AWL, M. D.,

OF COLUMBUS, OHIO,

— BY —

J. H. POOLEY, M. D.,

Professor of Surgery in Starling Medical College, Columbus, O.

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As generation after generation passes away, all but a few are quickly forgotten, and only in the records of omniscience is any memorial kept of the mighty multitudes, who like the separate drops of some swiftly flowing stream, are rapidly hurried into the oblivion of the great ocean that engulphs all.

The most strenuous efforts of survivors fail to keep in living recollection more than a few score names in a century, and of these, many, as time rolls on, become mere sounds in the ears of the majority, and are really known only to a studious few.

Humbling as it is, distasteful as we must own the prospect to be, we must each in turn submit to this universal oblivion, and however important we may think ourselves, fade away from the thought and memories of men, even as the mist-wreath of the morning fades from hill-top and valley.

The desire, though we cannot avert, at least to retard this universal destiny, is inherent in the human heart—an earnest of that immortality which is our awful birthright as the sons of God—and which, though baffled, is never quenched.

No member of modern society is so necessary to it as the physician, and none, if he comes nearer even to the ideal of his calling, is so deserving of its grateful remembrance. And yet gratitude, which has been cynically defined as a lively sense of favors to come, when he can no longer minister solace and relief, soon allows him to be forgotten.

It is well, therefore, that we, as a confraternity of physicians, memorialize from time to time our honored dead, and grace the pages of our annual transactions with the record of those virtues and achievements, which, alas, too often we were slow to recognize during life.

While to all our brethren we owe this meed of remembrance, there are some, however, who demand more than the customary tribute at our hands, whom to neglect would be our shame, and who having illustrated in an unusual degree those beneficent and self-sacrificing attributes which are the glory of our profession, have conferred a benefit and shed a lustre upon the common body, have made us all their debtors, and cannot want our word of eulogy without our speaking loudest in that very silence our own disgrace and degradation.

Such an one was the subject of this sketch, a man who has made the name of physician more beloved and honorable than it would have been if he had never borne it. Who, not content with the ordinary channels of professional philanthropy, sought new paths of usefulness, proved his love to man by life-long deeds of helpful service, and started streams of blessing that shall flow amid the green memories of grateful hearts for all time to come.

Where others would have waited for opportunities to do good, he made the opportunities that he might do the good, and to the end of a protracted life showed the beauty and power of a consistent unselfishness.

Not amid a great city's stimulus and pressure, not out of the abundance of a princely fortune, not from the van-

tage ground of a lofty public or social position, but in an obscure community, amid the discouragement of moderate means, and with no favor of position except that which the world always accords to genuine goodness, did he, whose memorial I here present, accomplish results which many of earth's great and favored sons have failed to match with all the aids of money, influence, and opportunity.

Not only the medical profession, but the great Commonwealth of Ohio, whose magnificent charities are among its proudest boasts, owes a debt of gratitude to this plain man, whose care and self-denying labors assisted the birth and early struggles of almost all of them.

Dr. William Maclay Awl was born in Harrisburg, Pennsylvania, on the 24th of May, 1799.

From some interesting autobiographical memoranda, kindly placed at my disposal by his family, I extract the following account of his parentage and his early life; and have made free and frequent use of the same source of information throughout this sketch.

He says:—"My parents were both natives of Pennsylvania, the birthplace of my father, the late Samuel Awl, Esq., being in Dauphin County, three miles east of Harrisburg; my mother was born in the town. They removed from that place when I was but an infant, and settled on a small farm in Shamokin Township, Northumberland Co., one mile east of Sunbury, the country town, where they remained until their death. My mother's father was the Hon. William Maclay of Harrisburg, an attorney at law, and a member of the Senate in the first congress of the United States.

Her grandfather, John Harris, the proprietor of Harrisburg, was the first white child born on the Susquehanna river in that region. Mother was a noble woman; she departed this life, on the farm near Sunbury, called Spring Hill, on the 13th of August, 1823, in the 48th year of her age.

"My father was the son of Jacob Awl, a tanner and farmer of Paxton Township, Dauphin County.

Father was also a farmer, though very handy as a mechanic, and for muscular strength and activity, had few superiors. He died on the first of January, 1842, when he was sixty-nine years old, and was buried by the side of his wife in the grave-yard immediately south of Sunbury.

On the farm aforesaid, and along Shamokin Creek,—where I used to wade, swim, fish, and stone the water snakes in summer, and skate in winter—I spent my boyhood. There I went to school and was taught in the mode common at that time, and it was *common* enough!

If the manner of teaching had been calculated to elicit study, and encourage effort, or had in any degree been adapted to my nature, I should probably have appreciated the matter and learned more. But the process consisted mainly in pounding it in, after the same fashion to all characters, and with all dispositions—rough and earnest—though without much skill, and when contrasted with the present admirable system, it seems indeed a wonder we learned anything at all.

When about fifteen years old I was sent to the town of Northumberland, and placed in an academy under the charge of Rev. Isaac Grier, who came there from Cumberland Co. Pa., and entered upon his duties as principle of the institution in 1806."

"This academy became so famous under his excellent management as to obtain the charter of a college from the legislature of the State. This venerable man died in 1815 while I was at the school. He was a pious and learned teacher, who beside the duties of his academy, had, much of the time, the pastoral care of two congregations, one in Northumberland, the other in Sunbury.

After his death the college passed into the hands of his son, who had just graduated in Dickinson College, in Carlisle, and was beginning the study of law. He afterward became the Hon. Robert C. Grier of the U. S. Supreme Court.

I continued with Mr. Grier a considerable time, and acquired some knowledge of Latin and Greek in addition to other studies."

The time spent in this academy seems to have comprised the whole of Dr. Awl's preliminary education, for in 1817 he went to Harrisburg, and began to study medicine with Dr. Samuel Agnew, an eminent practitioner in that city, and under whose care and instruction he remained for about three years.

This pupilage seems to have been something more than nominal, for young Awl recited to his preceptor as regularly in anatomy, surgery, chemistry, &c., as if he had been at school.

Like most doctors of that period, Dr. Agnew had a small drug store, and here our student acquired many valuable practical lessons in the preparation and dispensing of drugs, never to be forgotten, and of the greatest importance in after life.

He attended lectures in the medical department of the University of Pennsylvania, during the session of 1819–20 when Chapman was professor of Practice; Physick, of Anatomy; Cox, of Materia Medica; Hare, of Chemistry; Gibson, of Surgery; and James, of Obstetrics. He did not graduate at the University of Pennsylvania, or attend more than this one course of lectures, but, probably, soon after this, though the date is unknown, he received the honorary degree of M. D., from the Jefferson College of Cannonsburg, Pa., at the instance, as he supposed, of his precepter, Dr. Agnew.

After his attendance on lectures he returned to Sunbury, and made several attempts to get into practice, in various places, but without success. In the spring of 1826, when not quite twenty-seven years of age, he left the town of Strasburg, Franklin Co. Pa., and with a knap-sack on his back, very little money in his pocket, and he himself says, not much sense in his head, (though in this respect he was

better furnished than he thought,) set out on foot for the State of Ohio.

He settled first at Lancaster, then called, as he informs us, New Lancaster, with the qualifying adjective printed very small on its bank notes. He was fortunate in making the acquaintance of some prominent people, and through the kindness of Dr. Robert McNeil, the principal physician of the town of that day he had the opportunity of seeing some patients, and making himself professionally known. Soon after his arrival in Lancaster, an incident occurred which was as singular in itself as it was fortunate for Dr. Awl.

Dr. Wm. N. Luckey, from the neighboring and rival town of Circleville, had come to Lancaster to perform a surgical operation, and the young physician was invited to be present. Dr. Luckey though well informed as to the nature of the case, and the proposed operation, seems to have been exceedingly timorous, and when the moment for action arrived, handed the scalpel to young Awl, requesting him to operate, this was at first declined, but upon being further pressed, and seeing that this singular and unexpected request was sincere, he did not longer hesitate, but performed the operation, successfully, and to the satisfaction of all concerned. This occurrence gave him consequence in the eyes of the people as well as confidence in himself, and proved a real start in business, at least the surgical department of it, to which he was inclined especially to devote himself.

He shortly afterward moved to Centreville, now called Lithopolis, a name which he himself gave it. The inhabitants petitioned for a post-office, and the department at Washington replied that they should have one if they would change the name of the place, as Centrevilles were already inconveniently numerous. A public meeting was called to consider this important matter, and Dr. Awl was made chairman of a committee on name. He proposed

Lithopolis, a name suggested by a ledge of freestone in the neighborhood of the town; after some opposition, and no little ridicule of this *outlandish* name, it was adopted, the post-office established, and Lithopolis it remains to this day, though very few of its inhabitants know who was its sponsor. Soon after this change of residence he was requested by Dr. Luckey to undertake an operation much more important than any he had previously encountered, if not the most serious that he ever performed.

This was no less than the removal of a very large tumor from the neck, involving the ligature of the carotid artery, and the extirpation of the entire parotid gland. I find the following notice of this operation in the Lancaster, Ohio, Gazette, March 20th, 1827, which will be read with interest:

"SURGICAL.—A tumor of immense size growing in the mouth of a little girl between twelve and thirteen years of age, a daughter of Mr. Neff of Clear Creek Township, in this county, attached principally to the right cheek bone, temple, angle and body of the lower jaw; of an irregular form, and strong cartilaginous texture, measuring from its commencement, immediately behind the ear to the apex, front of the mouth nine and a half inches, and weighing upwards of two and a half pounds, (the parotid gland included in the mass), was removed from its attachment and extracted on Monday, the 5th inst., by Dr. Wm. M. Awl, a young surgeon of considerable intelligence and enterprise. The carotid artery of the same side was taken up and tied, as well to prevent the re-growth of the tumor as the more effectually to control the hemorrhage. The little sufferer, we have learned, is at this time, (two weeks from the operation) doing well and likely to recover. We believe this is the first time the carotid artery has been taken up west of the mountains, and the fourth time in the United States."

A history of this case was published in the Western Medical and Physical Journal, October, 1827. This account I have not seen, but from a description from the Doctor's own lips, and a drawing of the patient prior to the operation, it is evident, that, for a young surgeon just entering upon practice, this was really a very remarkable operation. The case is referred to in Dr. Norris' statistics of ligature of the carotid artery.

Very soon after this he removed, at the solicitation of the inhabitants, to Somerset, Perry Co., Ohio, a number of families agreeing to employ him at once, and he soon acquired a large and laborious practice, riding daily on horseback, often to a considerable distance. It was while here that he saw his first case of insanity, a subject in which he afterward became so much interested, and with which so much of the labors of his future life was associated.

The case was that of a stout Irishman, who was so violent, that, having no other safe place to confine him in, he was sent to the county jail. He in his insane imagination mistook Dr. Awl for a catholic priest, and addressed him as Father Montgomery; by humoring this delusion the Doctor acquired a great influence over him, and induced him to take the necessary medicine. The impressions produced by this case, and the want of proper care and treatment for such patients, never left the Doctor's mind, and led indirectly among other influences, to those enterprises for the general good of the unfortunate to which so much of his life was devoted.

He was married on the 28th of January, 1830, to Miss Rebecca Loughey, of Circleville, in whom he found a helpmeet for him in both the earlier and later struggles of his life, and who still lives to mourn his loss. His marriage to this lady had a little of that spice of romance about it that is always pleasant to meet with, and which Dr. Awl himself delighted in to his dying day. He had some acquaintances in Circleville, and went to pay them a visit,

accompanied by his friend, Mr. William P. Darst, of Somerset, who was on a courting expedition at the time. As he was standing on the sidewalk, his attention was arrested by a young lady who was passing, so much so that he enquired her name, sought out a suitable introduction, became engaged at that very visit, and soon after was married to her as mentioned above.

Soon after his marriage, in 1830, he united with the Presbyterian church, of which he continued to be a consistent and useful member to the close of his life, and in which he was for many years a ruling elder.

In 1832 he left Somerset, and after a visit to various friends in Ohio and Pennsylvania, settled in Columbus, which was to be the scene of his future labors, in the Spring of 1833. Columbus, at that time, had a population of less than 4,000 people, and was very different from the city of to-day, for the buildings were very much scattered, and were neither very large nor fine.

During the first year of his residence in Columbus, he had an opportunity of proving his professional zeal and knowledge in combating an epidemic of cholera which raged during July, August and September.

He, in common with the other physicians of the city, was kept busy night and day during this period of suffering and alarm; among other things, he tried saline venous injections in one case, but relied mainly on calomel.

The disease broke out in the penitentiary, and Dr. M. B. Wright, who was then physician to that institution, called on Dr. Awl to assist him in taking care of the prisoners. Soon after this, in 1836, the present building was completed, and Dr. Awl was made physician to it.

In 1835, he, together with Dr. Drake and other prominent physicians, called a convention of all the regular and scientific physicians of the State to meet in Columbus; they met on the 5th of January of that year, in the First Presbyterian church. Among other subjects taken into

consideration by this convention, and prominent in the mind of Dr. Awl in calling it, was the establishment of proper institutions for the care of the insane, and education of the blind.

They memorialized the legislature on these important subjects, with the result of securing an appropriation of the necessary funds for building an asylum for the insane at Columbus, and Dr. Awl was appointed one of the trustees to build and manage the same. Before commencing to build, he, with two others of the trustees, spent several months in visiting various asylums in the Eastern and Middle States, so that they might appropriate all that was good, and avoid all experience proved to be objectionable in the erection of the new institution. Finally, in 1838 the building was completed, and Dr. Awl, resigning his office of trustee, was appointed superintendent of the asylum.

In 1837 he received the honorary diploma of Doctor in Medicine, from the Medical College of Ohio, in Cincinnati.

He held the office of superintendent of the asylum for twelve years, or until 1850. During this long incumbency he gave perfect satisfaction, and by his earnest devotion to his duties, and judicious management of its affairs, made the institution a credit to the State. His heart was ever engaged in the cause of the unfortunate, and his mind ever alert in devising schemes for their relief. In 1837 he proposed the Ohio Institution for the Education of the Blind, which was first opened the same year in the basement of the Presbyterian Church with a very few pupils, but has since grown to be one of the noblest charities of our State and Nation.

This institution was ever a source of friendly solicitude to him, he was Physician to it at the time of his death, and both its officers and pupils showed their high appreciation of his worth by appropriate resolutions, and the latter by a request to be allowed to sing the hymns at his funeral, which was granted, and their sweet and plaintive strains formed a most touching part of the impressive services of that day, causing unbidden tears to start from many an eye.

Dr. Awl was one of the founders of the Association of Superintendents of Insane Asylums of the United States and Canada, an association that has been of the highest utility in promoting progress in this important department of philanthropic medicine. He was second President, serving three years, from 1848 to 1851, and during one of its earliest meetings in Philadelphia he proposed the establishment of schools for idiots and feeble-minded persons, which was the first suggestion of the kind in this country.

He was one of the original members of the American Medical Association, and at the first regular annual meeting of the association at Baltimore, in May, 1848, was chosen one of its Vice Presidents.

Dr. Awl was an honorary member of the Medical Society of Ohio, and as the list of honorary members of this society is a small one, so the greater may be esteemed the honor of appearing among the number, but he was professionally a public spirited man, having the welfare, dignity, and usefulness of his profession much at heart, and it is therefore no wonder that he was the recipient of many of its honors.

In 1861 he was appointed by Gov. Denison one of the Board of Medical Examiners for surgeons in the Ohio regiments, and was president of that board during its existence. In 1862, Gov. Tod appointed him Superintendent of the State Capitol, which office he held six years. In 1873, Gov. Allen appointed him Physician to the Blind Asylum, which office, as already stated, he held to the close of his life, and prepared his last report only a few days before his death.

After his retirement from the Insane Asylum, Dr. Awl never acquired a very extensive general practice, though he was considerably sought for consultation by other physicians. The years that others had devoted to building up business, he had unselfishly devoted to benevolent ends, and when he again entered the arena, his place was filled, but he found a better reward in the consciousness of good

done, and the esteem of all who knew him. He was a member of the Presbyterian Church 46 years, was elected elder in 1857, and was frequently a delegate to Presbytery Synod and General Assembly. Everywhere and always his Christian integrity, wisdom, and moderation, made him a valued counsellor, and his opinions carried the weight only given to those whose character is well known, and above reproach.

The Doctor was a constant reader and student, not only of medicine, but of general literature, and particularly of scriptural literature. He has left many manuscripts which attest his industry and talent, among other things he prepared a Biblical Chronological Chart from Adam to Moses, which was published, and is a work of great ingenuity and labor.

For the last two or three years of his life his health was very feeble, a failing heart and embarrassed respiration, the result of degenerated kidneys, making life often-times a burden; a burden which, however, he bore with Christian cheerfulness and hope. At last insensibility and convulsions closed the scene, and after many hours of unconsciousness he passed away November 19th, 1876.

Though no parting words told of his prospect beyond the grave, his long and well spent Christian life, are a far better assurance that for him there was laid up a crown of righteousness that fadeth not away.

Dr. Awl was a man of the greatest tenderness of feeling, and withal of firmness and force of character, and if any suppose the religion which he professed is necessarily associated with gloom and moroseness, he was a living contradiction to such an erroneous idea, for he possessed a constant fund of rich though kindly humor. He recommended the service of his Master, not by self-righteous seclusion, or solemn mannerism, but by cheerful activity in the service of his fellow-man.

" Write, blessed are the dead who die in the Lord, for they rest from their labors, and their works do follow them."

MILK-SICKNESS,

— BY —

S. S. GRAY, M. D.,

PIQUA, OHIO.

MILK-SICKNESS,

— BY —

S. S. GRAY, M. D.,

PIQUA, OHIO.

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Having been appointed at the last session of this society to report on milk-sickness, I proceed to the performance of this duty:

This subject is one that has been ignored by almost all of the standard authors and professors in Theory and Practice in our schools, or if mentioned at all, has been passed over so lightly as to leave the impression that it is a disease of but little importance.

Almost the entire literature on this subject consists of a few articles scattered through our journals by practitioners who have been in the midst of it, or some unprofessional man who has, as he thinks, found out the cause of the poison, each setting up his theory only to have it overthrown by some other, or by an array of facts that prove it incorrect, at least in part.

If by this report, I can but awaken an honest criticism, and an investigation on this subject, that has received so little attention by the mass of medical men, I shall feel myself amply repaid for the effort.

In discussing a disease that is surrounded by so many mysteries as this is, I shall proceed in what may be considered an irregular way, giving such facts as have fallen under my own observation, and as have been obtained from those who have had much experience with it.

It is called Milk Sickness, Sick Stomach, Trembles, Slows, &c., names derived from some peculiar circumstance or symptom that is prominent in almost every case of the poison.

It is first developed among animals, generally of the herbivorous class, being obtained by them from the uncultivated lands, and generally supposed to be taken into their stomachs with their food.

The manifestation among animals is, if left alone, to stand or lie around for a few days, refusing to eat, and dying soon. But, if exercised violently, only for a short time, they are seized with trembling, and, in many cases, fall down and die suddenly. A horse may be taken from the pasture, without any symptoms of the poison, be driven for a few miles, and drop down dead in the harness.

Hence the practice among some stock men, who have been herding in a suspicious pasture, before putting a whole drove on a long drive, to take one out and drive it some miles, to see if it develops any symptoms of the poison, rather than take the chance of losing largely.

The milch cow is the only animal that is comparatively safe, the poison being eliminated from her system in the milk. But while she is safe, she deals disease and death to her benefactors and those around her with no stinted hand.

Calves, pigs, dogs, cats, and almost everything that partakes of her lacteal bounty, are her victims.

While this may be laid down as a general rule, it is subject to many exceptions; and here we meet with one of the difficulties in the investigation of this subject. It is seldom that all the stock of a certain pasture are simultaneously affected. Neither is it common for a whole family, or those who eat at the same table, all to be affected at the same time, if at all. To illustrate: On the farm of George Nettleship, of Miami County, which has been opened for many years, but which is not entirely clear of this poison, the stock were put in a certain woods pasture. The father and mother had become poisoned and yet not to an extent

that it was impossible to care for themselves, and, not suspecting milk sickness, they allowed a small child to subsist almost entirely, for some days, on bread and butter, and the milk obtained from these cows, and yet it showed not the least symptom of the poison. One cow that was dry became affected with the poison and died: the rest of the cows were regularly milked and escaped. The dogs ate of the dead cow and died. Some of the buzzards that came to feast on the carcass, also fell victims and were found dead in the immediate vicinity. Why did the child escape, and why did the parents get the poison, are questions more easily asked than satisfactorily answered. That the flesh of animals contains this poison, is one of the questions that is settled. Even fish have been known to die in a short time after eating of the dead animals thrown into the water. Beef and veal are, doubtless, frequently, the vehicles by which this poison is conveyed to the human stomach.

The poison, as developed in man, is followed by perhaps as much uniformity as the symptoms of any other disease. We first have languor, variable appetite, gnawing at the stomach, nausea, torpidity of the bowels, stiffness of the limbs, and an aversion to exercise. Truly it may be said our patient has the "slows." If overheated then come the "trembles" and sick stomach, the languor becomes exhaustion, nausea, vomiting, gnawing, intense burning, torpidity of the bowels, and incontrollable constipation. His constant desire is for cold water to quench his insatiable thirst, by which he hopes to cool the intense burning, the soothing effect of which is but momentary, and is soon exhausted, and if the patient be allowed more water, it is followed by the same result, and what he most desires only increases his suffering. He rolls from one side of the bed to the other, hoping by change of position to get relief, careless of all surroundings and as to what his exposure may be.

Breathing slow, with occasional sighing, tongue moist and but slightly coated.

Radial circulation almost normal. But a violence of the circulation of the aorta, very perceptible, and of which the patient often complains. The bowels are not usually tender to pressure.

The ejections which were at first white, glairy matter, with the fluids and medicine taken into the stomach are now of a muddy brown. The peristaltic action of the whole alimentary canal seems to be inverted. In the intervals of vomiting there may be hiccough. With all the suffering and prostration the intellect remains clear.

As the disease advances, the extremities become cold, a clammy sweat breaks out over the body, and the patient dies from utter exhaustion.

It is claimed by many persons and practitioners that there is a peculiar smell that is pathognomonic of the disease. In the face of so much evidence, I do not feel like saying that it does not exist, but I have failed to detect it even in the same room where others have thought it very distinct.

What this poison is, that is so subtle, and what produces it, are questions that have not been settled. One great difficulty in its investigation is the uncertainty of its appearance. There are but few localities that will produce it with regularity, and in every case. I have known of a certain woods field that has for a long time been suspected, and was not pastured by the proprietors. The fences became neglected, and for many years the cattle of the neighborhood pastured there *ad libitum*. In fact, during the dry seasons, when water was scare in other localities, it became a favorite resort, and it was thought every vestige of the poison was obliterated. But one year ago the fences were closed, and, in two weeks after the stock of the owner was turned into these grounds, the poison was distinctly developed in two members of the family, while the rest escaped.

The cattle were placed in tame pasture on the same farm, and no more poison was noticed.

By some it has been supposed to have a malarious origin as it has some symptoms that we have in congestive and other malarious diseases. If this be the cause, why do we not have animals affected with it in all malarial districts, and why not always have it when malarial diseases prevail, and at no other time? But this is not the case. On the contrary, we may have bilious, intermittent, remittent, and all of the diseases that are supposed to have malarial origin, and yet have none of this poison; or it may occur in mid-winter, when none of the malarial diseases prevail. Or, if it had the same cause for its origin, it would be benefited by the same treatment.

That it may have a malarial complication is undoubtedly true, as we have in almost all other diseases, and that it is the same poison may be demonstrated by many well substantiated facts.

That it is any special vegetable has been many times exploded, and the toxicodendron or poison oak that has been so many times arraigned, has been proven innocent beyond a doubt.

While the exact locality has never been found, it has, many times, been brought down to within a few acres. Near Troy, Ohio, at one time it was enclosed in a four acre lot, and every plant that wore a suspicious look was closely scrutinized, till all became satisfied that there was no plant there that was not found in adjacent fields where stock grazed with impunity, and every vestige of toxicodendron was removed from the grounds.

Many times the babbling brook and crystal spring have been fenced up and doomed to solitary confinement because it was thought they held this poison in solution. But not till the fences have fallen down or decayed by age, and it has been found that cattle could slake their raging thirst with impunity, has it been agreed that the suspicion was ill-founded and that no spring or water has been found that will produce the disease if stock be fed on healthy food. Cultivation certainly and effectively destroys the poison.

Dr. George Keifer, to whom I am indebted for many suggestions, related to me that a certain farm in Newton township, Miami county, which had been abandoned on account of this disease, was bought by an Eastern man. After losing two members of his family and much stock, he took the precaution to cultivate his farm and keep his stock on tame pasture, and there has not been a case on that farm for the last forty years.

Probably the most plausible theory, and one that has not as yet been overthrown, is that the poison arises from uncultivated lands during certain conditions of the atmosphere, and settles over the vegetation and is eaten by the stock, and meeting with certain other conditions in the stomach of the animal, the poison becomes utilized, and that no one plant or flower holds it to the exclusion of others. Thus it may be gathered in hay and stored away, and fed to stock in winter, as has occurred in some well authenticated instances.

Sheep have fallen victims to this poison when the ground has been covered with snow, by digging down and eating the grass.

When it is taken into consideration how little is positively known about this disease, it is not surprising that skeptics are found, who live in localities where it is never met, who deny that it is a specific disease. But let the skeptic get in the right locality at the right time, and he will soon have his doubts removed.

When we cannot discover with any real certainty the cause of the disease, the treatment must be somewhat empirical, however much men may object to empiricism. The treatment is varied according to the peculiar views that the attending physician may have of the disease. Many empirics claim to have a secret remedy that is a never failing cure if they can only see the patient before it is too late. If the patient happens to die, of course, he

got the remedy too late. To one of my patients one of these remedies was given by a friend of the family. When I was sent for, I found the remedy to consist of lobelia and whisky. Of course, my patient had sick stomach then, beyond a doubt.

Dr. J. K. Knouff relies mainly on turpentine and whisky and has seen much benefit from this remedy. Others rely on calomel followed by castor oil and turpentine.

The first and greatest object is to arouse the secretions of the lower portion of the alimentary canal, and thus overcome the constipation.

The indications appear to be best met by the free use of citrate of magnesia, which makes a pleasant and agreeable drink, and is as well received by the stomach as any other drink, with a free use of enema of warm water, or something more stimulating. Let these be used in large quantities until the bowels are relieved of all hardened deposits. This may be continued indefinitely until the indications are that the crisis is past and convalescence is established. Then with light, digestible food, and proper care, we may expect a good recovery. But the least exposure or exertion may bring on a relapse, as occurred in the case of one of my patients when he thought he was well. On going to the field he attempted to pitch a load of hay, four weeks after the first attack, and it brought back the trembling and nausea, and he was compelled to desist until the cure was complete. Many cases have gone through the disease, not certain that they had been poisoned by this scourge, until they discovered their inability to stand the farmer's heat and exertion. This is one peculiarity of the disease, convalescence is very slow.

The conclusions arrived at from a discussion of the subject are:

1. That it is a specific disease.
2. That it is a disease produced by taking a poison into the stomach with the food.

3. It originates alone in wild and uncultivated lands.

4. That cultivation destroys it.

5. That the specific poison has not, as yet, been discovered.

6. That herbivorous animals are the first to be poisoned with it, and afterward it is transmitted to carnivorous animals and man, by their flesh or milk.

7. That no antidote has yet been discovered.

8. That there should be a more thorough and systematic investigation of this disease by post mortem and analytical examination.

MANIPULATIONS

— IN THE —

REDUCTION OF DISLOCATIONS,

— BY —

S. F. FORBES, M. D.,

TOLEDO, OHIO.

From the Committee on Railroad Injuries.

MANIPULATIONS IN THE REDUCTION OF DISLOCATIONS,

— BY —

S. F. FORBES, M. D.,

TOLEDO, OHIO.

From the Committee on Railroad Injuries.

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Mr. President and Gentlemen:

In the briefest manner possible, I desire to call attention to the reduction of dislocations by manipulation. It is of the enorthrodial, or ball and socket joints, that I shall chiefly speak, although not confining myself entirely to this class of joints. The ease, safety and rapidity with which these dislocations can generally be reduced by manipulation, will astonish every surgeon who witnesses the procedure for the first time. Without circumlocution and also premising that there is nothing original in the ideas set forth in this paper, I proceed at once to speak of dislocations of the femur.

Sir Astley Cooper, and surgeons generally since his time, have recognized four dislocations of the femur, viz: upwards and backwards upon the dorsum illii; backwards into the sacro-sciatic notch; downwards into the foramen ovale; and upwards and forwards on the horizontal branch of the pubes.

Other forms of displacement are also described, such as where the head of the bone lies between the anterior superior, and the anterior inferior spinous processes of the ilium, also when it is thrown backwards and somewhat downwards behind the tuberosity of the ischium.

Fortunately for humanity as well as for surgeons, the most common displacement of the femur is the one first mentioned, viz: that upon the dorsum illii. Surgeons formerly attempted its reduction by direct traction, by means of pulleys, and often made use of enormous power with these implements without success.

The poor patient was frequently subjected to the terrible strain of the pulleys for hours, erupting muscles, tendons and ligaments, and at last, turned off by his surgeon to become a cripple for life. It remained for one of our American surgeons, Dr. Reid, of Rochester, New York, to originate, or at least to promulgate a method of reduction of dislocations of the femur, which has deprived those accidents of their horrors and given to the world one of the greatest boons of modern surgery. I am well aware that many surgeons before Dr. Reid did at varying intervals propose and reduce this dislocation by manipulation, notably, Dr. Nathan Smith of New Haven, Conn., and others about the early part of this century. Indeed, way back through the centuries as far as the time of Hippocrates, history informs us that this method was occasionally practiced with success.

But to Dr. Reid is due the honor of first reducing this method to a system, and, in an elaborate paper, with reports of cases, of bringing it prominently before the profession, I will describe his method of reducing these dislocations by manipulation as may be found in the more recent works on Surgery.

Presuming that the dislocation is upon the dorsum illia, or into the sacro-sciatic notch, and that the patient is under chloroform, the surgeon grasps the dislocated limb, one hand upon the knee, the other around the ankle, flexes the leg on the thigh, carries it over and down well towards the sound one, upwards across the pelvis as high as the umbilicus, and then by abducting and rotating the limb outwards the head will readily shoot into the socket.

Those of my hearers who were educated a quarter of a century ago, never heard from their teachers, or saw in their authors this simple method of reducing these dislocations. For their benefit I repeat the very brief steps of the manipulation. Flex the leg upon the thigh, carry it over the sound one upwards, across the pelvis as high as the umbilicus, and there abduct and rotate the limb outward.

With a bottle of chloroform in his pocket, the surgeon can now visit his patient feeling that with his hands alone he can safely expect to produce this most formidable dislocation in a few seconds after anæsthesia has occurred.

Are there no failures of this very simple process to effect its work? I answer, was their ever a rule without exceptions? In the few cases which have occured in my own practice, I have met with no failures, though a brother surgeon of our city, (Dr. Jones), reports to me that he has met with two failures in an experience of six or eight cases which he afterwards reduced with pulleys.

I think I can readily understand why in certain cases there might be failures. For instance, in cases where the accident has been of such nature as to tare off or rupture the co-ordinating muscles which should assist in drawing the head on to the edge of the acetabulum. In a case in my own practice, I remember where the sweep described by Reid had been made by myself and two other surgeons a number of times, still reduction was not accomplished. Judging in this case that the head of the bone did rise on the edge of the socket, as it ought, I directed an assisting surgeon to insert his arm under the bent knee of the patient, and at the proper moment, just when I was about to make abduction and rotation, to lift up smartly, he did so and immediately the head went into its socket.

Again failures I think might sometimes occur where the head in slipping through the capsular ligament, had produced only a very small rent in the ligament. In these cases the return of the head is prevented by the folded

ligament standing guard, as it were, over and around the edge of the socket. What surgeons call button-holing it back should be resorted to in these cases. The head should be made to hunt its hole, as it were, when with a little direct force reduction would be effected.

That there may be other causes of failure I presume quite possible, but I feel it my duty to say that no surgeon in the present time, in attempting the reduction of a dislocation of the femur, especially of the above varieties, would be blameless without first trying Reid's method in a thorough and scientific manner.

In a paper on this subject by Dr. Frank H. Hamilton, an analysis of sixty-four cases by manipulation, and sixty-two cases by other methods, is presented, which furnishes evidence of the value of this and other methods. Of those by manipulation, in one case an abscess formed, and in a year after there was evidence of seated morbus coxarius. In one other the femur was broken at the neck, while extension as well as manipulation was going on. He says it was difficult to determine whether the fracture was due to manipulation or extension; further, the dislocation was of seven weeks standing. He concludes by saying, "So far as I am able to say, these are all the examples in which serious injury has been, with any propriety, charged to manipulation in those sixty-four cases. I suppose of the sixty-two cases by extension, in five the femur was broken, and of course, the dislocations unreduced." His concluding words are: "Of the failures by extension almost every surgeon, the journals, and the treatises furnish sufficient examples, while of the sixty-four cases of attempted reduction by manipulation, collected by me, except the case in which the bone was broken, only two were positive failures."

Of the other dislocations of the femur, viz: the obturator and pubic variety, I can say nothing in regard to their reduction by manipulation, having never met with

either. But I see not why manipulation might not be used to advantage in these cases also, though the maneuvers would have to be made in a different manner. The long shaft of the femur used as a lever would, in the hands of the surgeon, serve to throw the head from its false position and approximate it to its proper place, making it take in its backward course the route followed in dislocation. But fortunately these varieties of dislocation are so unfrequent that many surgeons pass long and active professional lives without meeting a single case of either variety.

The very gratifying results attending the reduction of dislocations of the femur by manipulation, doubtless turned the attention of surgeons towards attempting the reduction of dislocations of other bones by the same method.

Dr. J. W. Hamilton, our fellow member, professor of surgery in the Columbus Medical College of Ohio, in a lengthy paper in the Cincinnati Lancet and Observer, for April, 1874, narrates a method of reduction of dislocation of the shoulder by manipulation, which he confesses was suggested to him by the use of Reid's method in reducing dislocations of the hip. While it is true that of all joints in the body, the shoulder is the most easily reduced when dislocated, and while I aver that in all cases I ever saw of recent dislocation I never experienced the least trouble in their reduction by the usual and former methods; yet in candor I am compelled to admit that in a few cases seen recently where manipulation was used conjointly with the older methods, the reduction was still more easily accomplished. In an ancient luxation of the shoulder, occurring in my practice during the past summer, in a powerfully muscular young man, which had existed seven weeks, and in whom adhesions had firmly bound the bone in its false position, the usual methods of extension, counter extension, rotation, &c., were tried for two hours or more unsuccessfully, when manipulation was resorted to, and in a short time the reduction was effected.

I would not be understood as implying in this case that the previous efforts made were valueless, but that in all old standing dislocations of the shoulder, both the older methods and that by manipulation will enable the surgeon more certainly to accomplish the desired result. In all recent dislocations of the shoulder into the axilla, I am quite satisfied that, in the hands of a surgeon of a little experience in this procedure, reduction by manipulation may be accomplished more readily than by any other means.

Dr. Hamilton describes his method as follows:

"The patient lying flat on his back, on a common table, carry the injured arm from the side of the table, first, till with the body, it makes a right angle, thence still further, till, with the axis of the body projected upwards, it makes an angle of forty-five degrees. At this stage flex the fore-arm to a right angle with the arm. In a state of medium rotation the fore-arm will at this stage be in a direction perpendicular to the table. Keeping the fore-arm in this state of flexion, and for the present the arm in this state of rotation, let the member be grasped by an assistant. If the pectoral and latissimus muscles are found to be tense, wait and divert the patient's mind a few moments until they become relaxed?

"Now let the surgeon take his position at the end of the table between the patient's arm and head. He will now place the tips of his two thumbs on the tip of the acromion process, and the tips of all the fingers on the displaced head of the humerus. The assistant should now pull steadily but slightly. At the same time the surgeon presses in the opposite directions upon the tip of the acromion and the head of the humerus; or in other words, press them gently toward each other, when the bones will probably pass into position instantly. If they do not, rotate the arm so that the fore-arm will be carried from a perpendicular inward to an angle of forty-five de-

grees, more or less, and then repeat the movement. This failing, rotation, still further inward or outward, may be tried."

An indispensable pre-requisite to success, says Dr. Hamilton is a relaxed condition of the pectoralis, major and latissimus dorsi; of course this could not be accomplished by diverting the patient's mind, it might be accomplished by anæsthesia.

From my own limited experience, from the numerous cases reported by Dr. Hamilton, and the testimony of other Surgeons, I am well convinced that this procedure for reducing dislocations of the shoulder, like Reid's method for reducing dislocations of the hip, is a long step forward in modern surgery.

One other dislocation I desire to call attention to, which, while it involves a fracture also, is nevertheless strictly within the purview of this paper. I allude to dislocation of the ulna, in what is known as Colles fracture of the fore-arm. From the earliest days of surgery down until a few years past, this fracture has been the opprobrium of surgery, where as often happens, it is accompanied by dislocation of the ulna, and displacement of the tendon of the extensor ulnaris. The country is full of deformed fore-arms, the result of what was until recently an apparent inability to keep this fracture properly in apposition until a union was accomplished. The older text books admitted that even in the hands of the most skillful and experienced surgeons some deformity was common after this fracture. I remember to have had much trouble in my earlier professional life in the management of this fracture. In one instance I was obliged to apply my splints so tightly to keep the bones in apposition, that there resulted more or less atrophy of the thenar, and hypothenar eminences, and a consequent criping of the hand for many months after union had taken place.

To Dr. E. M. Moore of Rochester, and professor of

surgery in the Buffalo Medical College, the profession is indebted for discovery of the cause of this persistent deformity in Colles fracture, and for the means of its prevention and cure.

He relates the case of an insane woman who threw herself from the third story of St. Mary's Hospital, Rochester, striking the ground with both her hands, receiving also other injuries of which she died in a few moments. There was a Colles fracture of both fore arms. An examination of the right arm was commenced, to discover the cause of the persistent deformity in these fractures. After dissection it was found the deformity was kept up by a dislocation of the ulna outwards and downwards, made, of course, at the moment of fracture of the radius, with displacement of the tendon of the ulnar extensor from the side of the ulna to the top of this bone, and entanglement of the styloid process under the fibers of the annular ligament, which still more held the ulna in its false position. An examination of the left wrist showed a precisely similar condition of the parts, except as to the line of fracture. Reduction of the dislocated ulna and the disentanglement of the end of the styloid was effected as described below, when opposition of the fractured ends of the radius took place with no tendency to the renewal of the deformity as before. Dr. Moore describes his method of procedure as follows: The patient may be etherized or not; "An assistant holding the fore-arm of the patient, the surgeon grasps his hand, the right with the right, and *vice versa*. With the other hand placed under the fore-arm, above the fracture, he is enabled to bring the thumb over the back of the ulna, the fingers wrapping around the radius. Traction is first made by extension, then drawing the hand laterally to the radial side, then backwards, and while making extension it is swung to the ulnar side, bending well laterally, when the extension of the hand is changed for flexion, thus describing nearly a semi-circle in circumduction. The position of

the hand grasping the fore-arm undergoes constant change, as it is the antagonist of the other hand in everything but extension. As the backward position, when it is carried to the ulnar side is changed to flexion, the thumb of the surgeon rolls around the border of the ulna and is below when the maneuver is complete. The test of reduction is to be found by the presence of the ulna on the radial side of the ulnar extensor, and I might add, perfect shapeliness of the limb and no tendency to renewal of the displacement.

Reduction of the dislocated ulna having been effected, almost any kind of dressing that will keep the parts steady will answer. Dr. Moore simply places a common roller, about two inches long and a half inch in thickness, along the inner border of the ulna and retains it by a strip of adhesive plaster of the same width and hangs the arm in a narrow sling, so that the weight of the hand shall press upon the ulna. I confess that I have never dressed one of these fractures so simply, but usually apply a pistol stock splint for a short time, the better to secure the parts as it seems to me.

While I am ready to admit that when reduction of the displaced ulna and the tendon of the ulnar extension and the disentanglement of the styloid is effected, all is accomplished, yet I think that both the patient and surgeon feel more comfortable with dressings which give greater steadiness and security.

In conclusion, gentlemen, I ask for the various maneuvers here mentioned, for the accidents alluded to, a fair and faithful trial at your hands. I am satisfied that they are long steps in advance over our previous management of these various accidents. I am quite well aware that the most, if not all of you, well know and understand the methods here described. But I also believe that not all, nor even most of you, put them in practice when occasion demands. We should all remember that it is not what we

know, as physicians and surgeons, which gives us success and makes us of service to society, but it is the practical application of that knowledge at the proper times and places which fit us for the high place of conservators of the public health and welfare.

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DISCUSSION ON DR. FORBES' PAPER.

Dr. Pooley, after complimenting Dr. Forbes on his paper, and American Surgeons generally, spoke of the method of reducing dislocations of the hip-joint, as described by Dr. Sutton, of Indiana. He commended this method both theoretically and practically, he having used it in one case. As to Colles fracture, he thought Carr's splint the best in treating it. The speaker then gave a description of these splints.

Dr. Thorn added to the description of these splints also.

Dr. Harmon thought the "paste-board" splint the best.

Dr. Baldwin, after speaking of the Barr splint insisted on perfect relaxation of the fibres of the pectoralis, major and latisimus dorsi muscles, as essential to reduction of shoulder dislocations, as described by Dr. Hamilton.

Dr. Hart of Marietta, said country surgeons could not afford to keep on hand a supply of splints, and in his own practice, used, in Colles fracture, straight splints properly padded.

Dr. Hubbard, of Ashtabula, said extension should be practiced more thoroughly, than is usual, in the treatment of Colles fracture; neglect of this being the frequent cause of deformity and weakness of the wrist-joint. His method is to apply adhesive strips to the hand, for extension, and to the fore-arm, for counter extension, and then attach a stiff wire bent near each end at a right angle, to the ends of the strips by means of entwining rubber tubes. A slight splint to the seat of injury completes the dressing.

Dr. Reamy wanted to know, why the plaster paris dressing would not be proper in Colles fracture? He had used it in one case and had an absolutely perfect result.

Dr. Dunlap replied by saying that he had constantly used this method of dressing, and had obtained better results than by any other method he had ever used. He had also used it in treatment of separated epiphysis of the upper end of the humerus.

Dr. Woodbridge had discarded plaster paris, and used in its stead, the glue and oxide of zinc dressing.

Dr. Paul, of Putnam Co., had used the plaster paris bandage in a compound fracture of the humerus with perfect result, though never removing it during treatment.

Dr. Beardsley of Ottawa, preferred a splint made by applying longitudinally to the limb, strips of plaster paris bandage until they fitted themselves to the parts, and then using them as ordinary splints.

Dr. Reid, of Norwalk, had used, with advantage, a solution of gum shellac, to make a permanent dressing. He thought *inflammation* of the wrist joint might be an *occasional* cause of the deformity following Colles fracture.

Dr. Jones urged the employment of extension in this fracture. If the tendon of the little finger was displaced and could not be restored, he would cut it.

In dislocations of the hip-joint he had no trouble in some cases in reducing the luxation. He remembered one case of that character, whilst in another case he tried exactly the same means and failed entirely. When the head of the bone slips into the obturator foramen, it should be turned back on the dorsum of the illium to where it was when began the manipulation.

Dr. Forbes explained his manner of manipulation in these cases, and how he prevented deformity in Colles fracture.

PARACENTESIS OF THE CORNEA

— BY —

S. C. AYRES, M. D.

CINCINNATI, OHIO.

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Paracentesis of the cornea is undoubtedly one of the most efficient means in our hands, of treating, mitigating and arresting the diseases to which this very important part of the eye is subject. The value of the cornea as it is related to the dioptric apparatus cannot be overestimated. It is in one sense as essential to vision as the retina, for if its property of transmitting rays of light be destroyed, the eye is almost as blind as if the retina was seriously diseased. A very thin opacity of the cornea or even a slight irregularity of its epithelium will cause decided impairment of vision, whereas we may have extensive disease of the retina and choroid and at the same time excellent vision, providing the region of the macula lutea is not involved. From the construction of the eye it is necessary for rays of light to pass through the cornea in order to impinge upon the retina, and everything which interferes with this, to the same degree affects the vision. If the lens becomes opaque we can remove it, but not so with the cornea. The want of the former may be supplied by placing a convex lens in front of the eye, but the loss of the latter is irretrievable.

Corneal affections constitute a large proportion of the eye diseases to which children as well as adults are subject. They are dangerous from the permanent opacities which

generally remain in the cornea, but are far more serious from the liability of the ulcers to perforate. An opacity of the cornea may in course of time be absorbed to some degree at least, and thus improve the impaired function of vision, or an artificial pupil favorably located, may accomplish the same result where there is no hope of the cornea clearing up.

If a corneal ulcer perforates spontaneously, we generally have a sudden escape of the aqueous. This from the intra-ocular pressure usually causes a prolapse of the iris, and then as the ulcer heals, we have the iris imprisoned in the cicatrix. When the ulcer is allowed to take its own course there is usually an extensive involvement of the corneal surface before it gives way and a proportionately large prolapse of iris. It not unfrequently happens that after spontaneous perforation the ulcer heals and the iris remains imprisoned in the wound, thus forming a pear shaped pupil, and that this condition of things continues for years without any further serious complications.

This, unfortunately, is not the termination of all perforating ulcers. Instead, we not unfrequently have a train of subsequent complications, ending in total loss of the eye. These show themselves in the form of chronic recurrent iritis, in staphyloma of the cornea, irido-chroiditis irido-cyclitis, secondary glaucoma and general atrophy of the ball.

Now the danger to the eye is not so much from the perforation itself as from the method in which it takes place. It is in one sense a natural result of the forces acting within the eye. As the ulceration proceeds and gradually thins the cornea the intra-ocular pressure forces the weakened portion out, and when it can no longer resist, the rupture takes place and the aqueous escapes.

The *rationale* then of the operation of paracentesis cornea is this, that we only anticipate an event which will subsequently happen, but with this advantage that we are able

to regulate the escape of the aqueous and prevent a prolapse of the iris. But we do more than this, we arrest the ulcerative process, limit the extent of corneal tissue involved, and thus diminish the size of the resulting opacity. The paracentesis once made, we can subsequently, by opening the wound with a blunt probe, cause the aqueous to drain off, if it may be necessary, and thus keep the ocular tension down and relieve the engorged blood vessels, restore the normal circulation and give the corneal tissue a chance to repair. We thus prevent those serious and often fatal complications to which reference was made above.

METHOD OF PERFORMANCE.

It is easily done with an ordinary Graefes cataract knife. With this one can make a larger or smaller incision, as may be indicated by the condition and situation of the ulcer. Whether one proposes to make an incision such as is described by Saemisch, or merely to perforate the cornea through the floor of the ulcer, this form of knife will be found most useful. The stop needle would be better suited to the use of general practitioners as there is a shoulder about 1″ from the point of the blade, which prevents it from entering the cornea further, and thus endangering the capsule of the lens.

A cataract needle makes too small an opening. There is a constant tendency in the corneal wound to close, and it is often desirable to prevent this, which is most easily done by making the original incision large enough to allow the aqueous to flow off freely, and permit the incision to be easily opened afterward with a probe.

In making the operation, it is better to place the patient in the recumbent posture, the head is thus more easily controlled and the patient prevented from dodging back from the point of the knife. The lids may be separated by an assistant, and thus do away with the use of the spring

speculum, which is as painful as the puncture itself, and is likely to cause a sudden escape of aqueous. It is better to fix the eye with the fixation forceps, as it enables the operator to make the puncture more accurately. Still it can be done without this where patients have considerable self control. The puncture is most easily made through the floor of the ulcer. The knife should be passed in obliquely so that its point can be seen to enter the chamber. If it is desirable to make only a small opening it should be immediately withdrawn, but if a larger one is intended, a slight motion forward of the point of the knife can be made as it is withdrawn and the length of the incision increased.

The operation recommended by Saemisch is applicable to a large number of cases, and its results have, in the hands of most operators, been very satisfactory. It is made in the following manner: The puncture is made on one side of the cornea in healthy tissue, after entering the chamber the knife is pushed rapidly across, and the counter-puncture made in the sound cornea directly opposite. Then the section of the cornea is slowly completed, so as not to allow a too rapid escape of the aqueous. The incision is thus made through the deepest portion of the ulcer, and as it is long, it does not close as quickly as the simple puncture. The advantages of this are that the aqueous flows off for several hours, or even days, as fast as it is secreted, and that when the wound does close, it is more easily opened with a blunt probe than a smaller one would be. The use of an anæsthetic is a question of considerable importance. The operation can frequently be done without it, but in children and in nervous persons and particularly where they have been suffering for a long time, it is better to administer ether. There is occasionally violent pain for half an hour or more after its performance; some suffer from a feeling of faintness, and others from nausea.

The great advantage of the anæsthetic is that one is enabled to perform the operation thoroughly, and to remove

coagula which form in the anterior chamber. The subsequent treatment is simple enough. The patient should remain in the recumbent posture for an hour or two. The pain immediately after the operation is sometimes very severe, but it usually does not last longer than fifteen or twenty minutes; if it should be unusually severe, a hypodermic injection of morphine may be given. Cold external applications, the compress bandage, and atropine should be ordered as they are indicated.

It is not my object in this paper to do more than indicate the various affections in which this simple operation has proved efficient. It would be out of place to go into a detailed treatment of the diseases mentioned, as a few characteristic cases will serve to illustrate the value of the paracentesis.

1st. In ulceration of the cornea:

This is at all times a matter of serious importance to the sight. It is almost certain to leave an opacity which will interfere more or less with vision especially if it be centrally located. It is possible for an ulcer to perforate spontaneously without a prolapse of the iris, but the general rule is that the cornea does not give way until an extensive surface is involved, and then the aqueous escapes with a gush and draws the iris into the perforation. It not unfrequently happens that after this the inflammation gradually subsides, and the iris remains imprisoned in the cornea. Vision in such cases is but slightly impaired, and the eye may remain good for a life-time; on the other hand, the ill effects which may result from a perforation of the cornea are numerous. The iris which in one case will remain quietly imprisoned in the cornea, will in another resent the restraint and suffer from repeated attacks of iritis. The cornea also may become staphylomatous or flattened, and in course of time the ciliary body, and choroid, and viteous become involved, and the termination will be in disorganization of the eye.

As in every disease, we endeavor to use all the means in our power to conduct the case to a safe termination, and to employ those agents which experience has proved to be most efficient, so in ulceration of the cornea we have frequent resort to the operation of paracentesis. A few cases selected from a large number will serve to illustrate its use.

Case I. J. T., aet. 19, has been suffering severely for several days with an ulcer situated in the lower segment of the right cornea. There is iritis with marked injection in the ciliary region. Paracentesis through the floor of the ulcer made May 22, 1873. The relief was prompt and decided, and there was no return of the severe pain. The ulcer gradually filled up, and there was no need of repeating the operation.

Case II. J. H., aet. 20, has been suffering from ulceration of the cornea for about two weeks past. It is of the phagedenic variety, and extends over about two-thirds of the cornea, but is quite superficial. The pupil dilates only moderately under the energetic use of atropine, but the injection and tenderness in the ciliary region persist. May 26, 1873, made paracentesis. The next day there was marked improvement in his condition. The pain was relieved and the injection in the ciliary region much less. He made a rapid recovery.

Case III. M. D., aet. 10, has an extremely painful ulcer on the outer and lower quadrant of the right cornea. Its edges are abrupt and sharply defined and the cornea around it shows a grayish infiltration. Atropine has but little effect in dilating the pupil, and its anodyne effects are very transient. I operated in this case without giving the child an anæsthetic. The first puncture gave decided relief, but it had to be repeated twice. In this case it was interesting, as well as instructive, to watch the gradual dilatation of the pupil under atropine as the inflammation subsided.

Case IV. J. C. R., aet. 64, has had chronic trachoma for several months past. The granulations are nearly cicitrized now, but he has an ulcer on the right cornea which is causing him intense pain. Paracentesis August 4, 1874. He had relief for three days, but it had to be repeated on the 7th. He had but little pain until the 14th, when it again became severe. Paracentesis was again made, and the aqueous evacuated on the two following days, and on the 17th, he was entirely free from pain. The cornea cleared up quite satisfactorily, and he made a good recovery.

These cases, taken from patients of different ages and with different varieties of ulceration, show that, while the operation may give relief the first time, yet it is not always the case. The fact that one puncture does not suffice should not discourage us from making another. While in a large majority of cases, the aqueous need not be evacuated more than once or twice, yet it occasionally happens that it will be required several times.

Rules which will apply to ulcerations from general causes will also apply to those occurring in purulent ophthalmia of new born infants as well as adults. It is not always possible, on account of the swelling of the lids and œdema of the injunction, to make a paracentesis, but where it is possible, it should not be delayed nor neglected. In fact, there is more urgent need of this operation on account of the destructive tendency of purulent ophthalmia.

Only a short time ago, in a case of ophthalmia monatami, the cornea in one eye was ulcerated when first seen. For a while it did well, and the cornea improved, but afterward became painful and the ulcerative process increased. The cornea appeared to be yielding to the intraocular pressure, and bulging forward. The child suffered severely, and there was danger that its crying would rupture the cornea, and cause prolapse of the iris, if not something more serious. To prevent this a paracentesis was

made. The ulcer soon began to fill up, the pain was relieved, and the threatened danger averted, and I had the satisfaction of seeing the cornea clear up so far that an iridectomy will some day give the eye a tolerable amount of vision.

If I might presume to formulate any rules on this subject, I would advise:

1. When the ulcer is evidently progressive, and does not yield to atropine, rest and anodynes, it is better to perforate at once, so as to relieve the pain and prevent the further involvement of the cornea.

2. It is especially advisable in children to administer ether, so as to be able to inspect the eye and make the puncture without risk of wounding the lens.

3. The wound should be opened every day until the pain is relieved, and the ulcer shows decided symptoms of improvement.

4. In case of relapse the paracentesis should be resorted to without delay.

HYPOPION KERATITIS.

What I have said above in relation to ulceration of the cornea, will apply with double force to this dangerous and complicated affection. The presence of pus in the anterior chamber is at all times an evidence of a high grade of inflammation. The pus is derived not only from the iris, which is frequently involved in keratitis, but also from Descmets membrane. It sinks by force of gravity to the bottom of the anterior chamber, and appears as a small, white line across the lower border of the cornea. If it is liquid it will change its position corresponding to that of the patient's head.

It sometimes happens that the presence of the hypopion is not known until after a paracentesis has been made. As the last of the aqueous escapes, a drop or two of liquid pus are mingled with it. The development of hypopion is pre-

ceded by severe pain, considerable ciliary injection, and decided photophobia. The quantity may be so slight as to be scarcely detected, and, on the other hand, so extensive as to fill the entire chamber, and obscure the iris.

Of all the remedies used in the treatment of hypopion keratitis, the paracentesis is our most valuable aid. We should not hesitate to resort to it, and it should be repeated daily until the tendency to suppuration is checked. I think it a good plan in these cases, after the incision in the cornea has been made, to press the upper lip of the wound backward, so as to allow a more ready escape of pus and coagula from the chamber.

The following cases are characteristic:

Case I. H. K., aet. 16, a delicate boy quite tall for his age, and of a strumous diathesis. He is suffering from superficial phagedenic ulceration of the cornea. The pain is severe and does not yield to anodynes and the usual local treatment. There is iritis and hypopion, and the aqueous is quite turbid. June 13th, 1873, made paracentesis. June 20th, has been relieved of pain ever since the operation. The inflammation of the cornea rapidly subsided.

Case II. J. S., aet. 31, has had superficial ulceration of the cornea for the past three weeks. There is considerable hypopion, and his suffering is intense. August 31, 1873, evacuated the aqueous by puncture through the floor of the ulcer. The next day the hypopion had again made its appearance, and the paracentesis was repeated. On the third and fourth days the incision was opened, although there was no hypopion. After this he made a favorable recovery without relapsing.

There are often found in the anterior chamber tough masses of lymph, which it is desirable to remove if it can be done without violence to the eye. They are often drawn into the incision by the gush of aqueous, and can then be easily removed with a pair of fine toothed forceps. In case they do not present themselves in this way it is better to let them alone.

ULCUS SERPENS.

This is not a common form of keratitis. It is extremely obstinate and very painful. The pain and suffering are out of all proportion to the surface involved. You will sometimes see only a small grayish, slightly curved line upon the cornea. It is apparently not deeper than the epithelium, and yet the pain is most excruciating. It is occasionally observed starting from the margin of the cornea, and gradually extending like a grayish line across to the opposite side. It progresses very slowly and shows but little disposition to perforate.

Atropine, anodynes, leeches, warm and cold applications have but little more than temporary influence over it. It is in this form of keratitis that paracentesis achieves some of its best results.

During the past few weeks an instructive case of this kind has been under my observation:

J. McC., aet. 25, has been suffering for some weeks with a very painful ulcer of the left eye. There is at this time (March 15, 1877), a small grayish line of infiltration extending upward from the lower margin of the cornea about one-fourth its diameter. Under the effects of atropine morphine, the compress bandage, and warm applications, there was a decided improvement in a short time, and he went home with prospects of a speedy recovery. In a few days, however, he returned, suffering more severely even than at first. The progress of the ulcer had been only arrested, not permanently checked. The grayish line of the ulcer extended further over the cornea and showed a decided disposition to advance.

I made a paracentesis in the course of the ulcer, cutting directly across it. The relief was decided but not permanent. The aqueous was evacuated by springing the incision with a probe, but in spite of this the pain returned every time the wound closed. I then made another and a more lib-

eral paracentesis directly through the extreme limit of the ulcer which had by this time reached the center of the cornea. This sufficed to arrest the progress of the disease, and he returned home shortly, and there has been no relapse since. It is more than probable that if the operation had been made at his first visit, it would have prevented the necessity of the second.

IN LUXATION OF THE LENS INTO THE VITREOUS.

This is a serious accident, and is often followed by glaucomatous hardness of the ball, liquefaction of the vitreous, or even by suppuration of the entire eye. I have lately had an opportunity of watching the favorable effects of paracentesis cornea in a case of luxation of the lens. It was in the person of a laborer about sixty years of age. While splitting a stick of kindling, one end of it struck him and inflicted a wound extending from the inner canthus of the left eye over the corresponding side of the nose. There was great oedema of the lids and chemosis of the conjunctiva. Vision was reduced to bare perception of light, owing to intra-ocular hemorrhage. In consequence of the turbidity of the vitreous it was impossible to determine the position of the lens, but from the tremulousness of the iris it was evident that it had been luxated. The swelling subsided under the influence of cold external applications, but he had repeated attacks of pain which threatened destruction of the eye if they did not render enucleation necessary. The tension of the eye was + 2, and knowing that this condition of things could not last long and the integrity of the retina be preserved, I made a paracentesis. Its effects were all I could ask, the pain was relieved and the intra-ocular tension diminished. The operation had to be repeated several times, but the ball gradually resumed its natural color and the media cleared up so that the lens could be seen in the vitreous.

Another case under the care of my associate, Dr. E. Williams, was equally relieved by the paracentesis. The patient, a man of seventy years of age, had had the lens of the right eye luxated about three weeks previously, and had suffered intense pain all this time. The pupil was widely dilated, the ball very hard and extremely tender to the slightest pressure. A single puncture with a Graafe's knife had the effect to reduce the increased tension of the ball and relieve the pain. In this case there was no intra-ocular hemorrhage. The lens was lying in the vitreous close behind the ciliary processes.

IN IRITIS.

In some forms of iritis a paracentesis is strongly indicated. Where the pain is severe, with marked injection in the ciliary region, and where the pupil dilates only moderately under the liberal use of atropine, although there are few posterior synechiæ, I have found a paracentesis of invaluable service. The violence of the pain is speedily subdued, the ciliary injection relieved, and the pupil dilates as soon as the ocular tension is diminished by the operation.

On case in point will suffice:

Mr. B., aet. 37, has suffered a violent attack of iritis, first in his right eye and afterwards in his left. He recovered from both after a tedious course of treatment. About six months after his recovery from the second he had another attack in his right eye. Atropine, warm poultices, anodynes and alteratives were tried for a short time as they had been in the previous treatment, but their effects were not satisfactory. I then made a paracentesis, which had a most decided effect in arresting the progress and shortening the course of inflammation and he made a rapid and satisfactory recovery.

I have thus hastily glanced at some of the more important diseases in which this operation is useful. It would

not be over-estimating its value to say, that without it we would be deprived of one of our most reliable means of combating several of the most dangerous diseases to which the eye is subject. It is within the power of every practitioner to take advantage of it, and thus relieve suffering, and at the same time add something to his own credit, professionally. I can most cordially recommend the operation to your favorable consideration.

ON THE SURGICAL TREATMENT

—OF—

PERITYPHLITIC ABSCESS,

—BY—

J. H. POOLEY M. D.,

Professor of Surgery in Starling Medical College, Columbus, O.

ON THE

SURGICAL TREATMENT OF PERITYPHLITIC ABSCESS,

— BY —

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*CASE I.

December 5, 1874, I was called to see Annie M——, a fine, healthy-looking Irish girl, 15 years of age, who had never had any serious illness in her life. For two weeks before I saw her she had been complaining of obscure uneasiness, increased at times to rather severe pain, referred mainly to the right iliac fossa, and spreading somewhat over the surfaces of the abdomen. I found her in bed, lying on her back, with her legs drawn up, with an anxious expression of countenance, and very much afraid of being touched or moved; skin somewhat hot and dry (temperature not taken); tongue coated; pulse 100; appetite gone; bowels obstinately constipated.

She complained of pain in the right iliac fossa, and in the hip and knee, that in the hip being most severe. There was tenderness on deep pressure in the iliac region, none over the abdomen. Complained of severe pain when the hip was moved. I ordered hot poultices to be applied over the right iliac region, morphine to the extent of relieving pain, and five grains of sulphate of quinine three times a day.

*This case was published in the *Medical Record*, New York, vol. x., p. 267.

December 6th. Much freer from pain; partially under the influence of morphine; takes abundance of fluid nourishment—milk and beef tea; lies in the same position, with the right thigh flexed at a right angle to the pelvis, and rigidly fixed, resists any attempt to move it; slight abdominal tenderness. The patient continued in almost the same condition, without any daily alterations worthy of notice, until December 10th, when there was an increase of tenderness in the right iliac fossa, which also extended pretty generally over the abdominal surface; aggravation of fever, with great restlessness; refuses almost all nourishment; has had one hard passage from the bowels since last record. Increased the quantity of morphine; continue other treatment.

December 11th. Condition much the same as yesterday; tenderness increased; has vomited some greenish matter. I think I notice to-day, for the first time, some fullness over the right iliac fossa. Continue treatment.

December 12th. The swelling first noticed yesterday is quite perceptible to-day. Fever higher; pulse 110; pain not so severe.

December 15th. Has had a slight chill. At the time of my visit, 10 A. M., is sweating profusely: swelling increased, otherwise condition unchanged; pain more tolerable; takes nourishment better than for last few days. Same treatment.

December 20th. Much worse; pulse 120; moaning constantly with pain; abdomen very tympanitic; vomits frequently a greenish material, and is much distressed thereby.

Swelling quite prominent; cannot tell whether there is fluctuation or not, for the simple reason that it is so tender she would not permit the fingers even to approach it; pro-

posed to cut down upon and open the abscess, which I felt quite sure existed, but the parents would not listen to it. Increased the dose of morphine, and substituted warm fomentations for the poultice, which seemed to distress her by its weight.

December 24th. Opened the abscess. This was the earliest period at which the parents would give their consent, though it should have been done much sooner. The patient being placed fully under the influence of ether, an incision three inches in length was made, an inch and a half above Poupart's ligament, but not exactly parallel to it, being rather over the greatest prominence of the swelling.

The incision was carried down through the several abdominal layers, but without being able to distinguish them accurately, they were so blended together by inflammatory action, until the fascia transversalis was reached. The moment this was opened, there was a tremendous gush of matter (estimated at nearly a pint), of a dirty, gray color, and so unbearably offensive that I was obliged to retreat for a moment into the open air. After the evacuation of the abscess, the finger could be introduced into quite a large cavity, where the cæcum could be distinctly felt, and also the iliac artery plainly pulsating under the finger. A tent of lint was introduced, a large poultice applied, and the patient put to bed, ordered to be kept very quiet, and to have morphine if pain was complained of; not otherwise. Visited her the same evening. She was found very comfortable, and had not needed any morphine. On changing the dressing some shreds of necrotic connective tissue were drawn out of the wound.

December 25th. Patient in excellent condition; free from pain, but quite weak. While syringing out the abscess with a solution of carbolic acid, there was discharged what proved on examination to be the whole appendix vermiformis, in a sloughy, pulpy condition.

No foreign body was found at this, or any other time, though of course one may have been discharged unnoticed in the first violent gush of matter when the abscess was opened. Ordered daily syringing out of the abscess with the solution of carbolic acid, and to take ten drops Tinct. Ferri Mur. every three hours. From this time everything went on excellently well; the patient improved day by day, and though the discharge continued free, and had a feculent odor for the first week, it then began to diminish in quantity, and completely lost its odor.

That there was at first a communication with the intestinal canal, was proved by the discharge from the wound on one or two occasions, of grains of pearl barley contained in some soup the patient had eaten. After the first week picked oakum was substituted for the poultices, and she began to sit up, though the abscess did not entirely close until the beginning of February, 1875, at which time it was completely healed up, and the patient was in perfect health, without the slightest remaining inconvenience from her recent dangerous and alarming illness.

This case deserves notice from the long time that elapsed between the formation of matter, and the opening of the abscess, without any prospect of an external opening being spontaneously accomplished, and from the discharge of the whole appendix vermicularis without a faecal fistula resulting.

CASE II.

I was sent for on the evening of August 18th, 1876, to see Lewis K——, a stout healthy German boy, aged twelve years. About 4 p.m., he was accidentally squeezed between a gate-post and the wheel of a cart that was passing through the gate. The main force of the compression took effect over his abdomen, principally on the right side, and in the right iliac fossa; he was very faint and pale when first injured, and when he rallied, vomited several times.

When I saw him he was still pale, with a feeble pulse, and anxious countenance, and complained of great pain in the right iliac region. There was considerable tenderness, but no tumefaction or discoloration to be observed. I prescribed morphine, in sufficient quantity to allay the pain, and hot fomentations over the abdomen.

Next morning he seemed to be much better, had passed a pretty good night, had no pain when he lay still, but could not move without bringing it on, tenderness still well pronounced. No change was made in the treatment, hot cloths to be kept over the abdomen, and morphine enough to be given to keep him free from pain, and slightly somnolent, diet restrained to liquid articles of food, such as soup and milk.

August 20th. Patient much better, can move about in bed without provoking pain, tenderness much less. Treatment continued for a day or two, at the expiration of which time he was so much better that it was discontinued. He kept on improving, and seemed to be so nearly well, that in two weeks from the date of injury he was dressed, and up about the house. He had only been walking about a few days however, when the pain and tenderness in the right iliac fossa returned, and gradually increased until he was obliged to lie on the sofa most of the time with his right leg drawn up toward the abdomen, nor could he extend it, or suffer the least effort in that direction to be made.

He had no fever however, and no pain over the abdomen, but his appetite became very poor, and he emaciated perceptibly, and his bowels moved only at infrequent intervals. He was ordered morphine enough to subdue pain and procure rest at night, hot poultices over the painful part, and full doses of quinine and iron.

September 10th. Lies down all the time, does not complain of any pain except on the slightest attempt at motion.

Has some fever at night, eats hardly anything, and is getting very thin. A distinct, but not well defined, induration, can be felt deep in the right iliac fossa, and extending some distance up the abdomen. Added cod-liver oil and milk punch to his other treatment.

September 15th. Had a chill to-day followed by fever and profuse sweating, swelling more perceptible, but diffused and very indistinct in outline, no fluctuation could be detected.

September 30th. The patient has had several chills, sweats a great deal, pulse rapid, looks very worn and anxious, getting very thin, case assuming a most serious aspect. Dr. Loving met me in consultation in the case to-day, I was inclined to operate at once, but he advised to wait a little longer.

September 25th. Operated with the assistance of Dr. T. C. Hoover, a promising young surgeon of Columbus. Patient fully under the influence of an anæsthetic mixture of alcohol, chloroform, and ether. Made an incision as for ligature of the iliac artery, over three inches in length, and parallel to Poupart's ligament. Dissected down, layer by layer, to the transversalis fascia, and still there was no evidence of fluctuation, but an exploring needle thrust in rendered the existence of pus evident, the fascia was therefore freely incised. A large quantity of stinking matter was evacuated, with numerous old clots of blood; after the emptying of the abscess, the finger on being introduced entered a cavity so large that it could not be fully explored. I could distinctly feel the cæcum, and the vermiform appendix coiled upon it, and firmly bound down by adhesions. A large tent of oiled linen was introduced, and a hot poultice applied. For forty-eight hours after this operation the patient was very low and prostrated; had to give stimulants freely; he then began to rally, and improved very rapidly.

The abscess was syringed out twice daily with a solution of carbolic acid; in four weeks he recovered entirely, and has ever since been fat and hearty.

This case was remarkable for the traumatic origin of the abscess and the slowness with which it formed. It seems quite probable that at the time of the violent accidental compression of the abdomen, some blood was effused in the neighborhood of the cæcum, and afterwards gave rise to inflammation and supuration. Although everything finally turned out well, it is evident that great and unnecessary risk was run in the delay in opening the abscess. Indeed, the principal point in the surgical treatment of these cases, is the propriety of operating promptly when the existence of matter is fairly to be inferred, and thus avoiding many risks, it is this that makes it an important and life-saving operation.

For the two following cases I am indebted to my friend, Dr. Samuel D. Turney, of Circleville, Ohio, in whose practice they occurred, and regret that they are so very meagerly reported.

CASE III.

"Wm. B., aged 17. Had fever, pain in the region of the cæcum, constipation alternating with diarrhoea, running through several weeks.

When I saw him his pulse was 130. There was a hard and tender tumor deep seated in the right iliac region, without fluctuation.

Operated May 5th, 1875, by a curved incision in front of the anterior superior spinous process of the ilium. Found about one ounce of pus behind the cæcum, no foreign body, wound left open, patient recovered."

CASE IV.

"Mrs. M., aged about 30. History of fever, pain and tenderness in right iliac region, constipation or diarrhoea for some weeks.

Found her with fever, tenderness and pain in the region of the cæcum, tumor with distinct fluctuation.

Operation as in last case, April 29th, 1875. Discharge of at least a pint of fetid pus, no foreign body, wound left open, recovery."

These two cases are valuable additions to the statistics of this subject, which, it is believed, are more fully presented in this paper than ever before. The feature of alternating constipation and diarrhoea which they both presented, contrasts strongly with the history of my own cases, which were obstinately constipated throughout, but this difference may have arisen solely from the fact that my patients were fully under the morphine treatment.

Of late years the literature of this subject has been so well written up, that one hazards a good deal in any attempt to add to it. I shall confine myself mainly, in addition to the cases here recorded, to pointing out the more accessible sources of information on the subject, and tabulating all the cases that have been operated upon in any way, that I can find on record.

This table includes more instances than any other which has been published, and thus, if this paper has no other value, I flatter myself it will have some in facilitating the researches of future students, and with this hope it is offered as a contribution to a most interesting and important subject.

Abscesses form in the neighborhood of the right iliac fossa, and around the head of the colon, from a variety of causes, and present certain peculiarities of situation, extent,

&c., which have led to their division into several classes, and given them different names.

All these distinctions are, however, practically unimportant. Whether there be perforation of the appendix, or simply inflammation of and around the caput-coli, from any cause, we may still conveniently and with propriety call all purulent collections thus resulting, perityphlitic abscesses, and consider them together.

Such collections of matter are walled in from the general peritoneal cavity by protective exudation, and are prevented from readily finding an external opening by the thickness of the abdominal walls. The matter thus pent up, if not evacuated by surgical means, may find an exit in various ways, but not often with safety to the patient, as statistics show, that left to nature, most of these cases end fatally.

The pus may find its way into the general peritoneal cavity, with the result of setting up an almost certainly fatal peritonitis; it may be discharged into the intestine, and this, though sometimes a happy termination, is by no means always or even generally so, it may empty into the bladder, or even into the pleural cavity.

None of these events can be considered desirable, some of them are most disastrous, and they may any of them happen while we are idly waiting for an external opening to take place.

Again, while we are waiting, the pus is increasing and accumulating, perhaps decomposing, running the risk of poisoning the system, wearing out the strength by hectic fever, or, as some cases prove, of coroding the iliac arteries, or producing thrombosis of these vessels. With so many and such grave dangers surrounding the patient, and so simple a problem presented for solution, it seems strange indeed that surgeons should have hesitated so long before

establishing the rule of interference in time to prevent the serious risks involved, and as experience now proves, with almost absolute certainty of rescuing the patient.

And yet so it was. For, though the suggestion had been thrown out of relieving these cases by a well-timed operation, no one acted upon it till Mr. Hancock, of London, did so in 1848; and though his case was perfectly successful, no one imitated his example, and the suggestion remained barren and unfruitful.

In 1867, Dr. Willard Parker, of New York, recalled attention to the subject, publishing some successful cases, and soon had numerous imitators, and now this, which is a real surgical improvement and advance, has been established upon a firm basis, and is a thoroughly recognized procedure.

Various suggestions have been made as to the method of operating, but to my mind the simple plan first proposed by Dr. Parker, seems so adequate and appropriate as to stand in no need of improvement, and unless it be in some exceptional case, should be generally followed. The symptoms presented by these cases vary very much, so much indeed as scarcely to admit of a detailed description that shall include all the possible phenomena.

Deep seated and continuous pain and tenderness in the right iliac fossa, persisting for days, with constipation or alternations of diarrhoea, fever, loss of appetite, and vomiting; and the formation of a more or less defined tumor, are the most prominent features. A chill, or repeated chills, may or may not mark the formation of pus; fluctuation is very often absent or masked by tenderness, which prevents a thorough examination, but there is one local sign of great importance as marking the occurrence of suppuration which is not as thoroughly appreciated as it seems to me it ought to be, and that is local œdema of the integument over the swelling, where this exists, it is an almost infallible sign of deep suppuration.

There are occasional cases where symptoms of the greatest obscurity have continued for weeks, leaving the practitioner in doubt, or alternating between various and conflicting opinions, before the existence of an abscess became manifest. In such cases, as a means of exploration, rather than generally as a guide for operation, we may thrust the needle of an aspirator into the swelling, with the safe assurance that it can do no harm even if it pass into intestine instead of an abscess.

Resonance over the tumor cannot be accepted as a diagnostic sign of the presence of intestine, for in several cases of large abscess it has existed, and may be caused by the presence of gas, which, either with or without intestinal perforation, is common in these cases. The exact time when to operate in any given case, must always be a point of some, often of very great perplexity and anxiety. It should be done neither too soon nor too late; time should be given for the collection to be firmly walled in from the peritoneal side; or either the sudden evacuation, by taking off support; or the introduction of instruments or injections may burst through and produce disastrous results. On the other hand to wait too long is simply to prolong the patient's sufferings, and subject him to unnecessary risks. Satisfied of the existence of matter, four or five days, or when the symptoms are mild, somewhat longer would seem to be about the right rule; and if upon cutting down to the facia transversalis, no appearance of bulging of matter be found, and an exploring needle entered at one or more points gives negative results, the wound may be left open; and the physician so far from feeling chagrined at the result, should congratulate himself that if matter is going to form, he has prepared for it a ready exit, and averted much danger and suffering, and if not, he has done no harm.

Several writers have expressed fears of the wound in the abdominal parieties giving rise to future hernia, but I have

not found the record of its having done so, nor aside from this teaching of experience does the apprehension appear to be well founded.

The protective barrier of lymph which has limited the abscess, and preserved the general peritoneal cavity from invasion, tends to prevent hernia, and the healing from the bottom and by filling up in part of the abscess cavity with the firm cicatrization which follows, does not weaken the abdominal wall.

The incision should be generous, the opening free, and after the evacuation of the pus, the introduction of the finger may afford valuable information, and assist in the removal of contents which have not escaped spontaneously.

For the first dressing a good sized tent of oiled linen and a poultice are best, afterwards the daily or twice daily washing out of the cavity with a warm solution of carbolic acid by means of a Davidson's syringe is the plan to be recommended, while oakum to absorb discharges is better than protracted poulticing.

For medical treatment, opium to control pain, suitable nourishment, and in the early stages of the complaint leeches or blisters, or both, have their advocates, and are worthy of a trial, but it may be fairly doubted whether indurated swellings that have threatened abscess but have disappeared under this treatment would not have done so equally well with rest and opium alone.

The annexed statistical table contains forty-six examples in which these abscesses were opened, most of them by regular incision, one or two by mere punctures when the abscess was on the point of bursting, one by a trocar, one by Vienna paste. Of these forty-six cases all recovered but five, of these five fatal cases, three were from peritonitis, one from abscess of the lung, probably metastatic or pyæmic, one from exhaustion.

In many of these cases foreign bodies were discharged from the wound, generally alvine concretions, either single and large, or small and multiple, in one case eight or nine; in one case a cherry stone was discharged, in another several lumbricoid worms, and most extraordinary of all, in my first case the whole appendix vermiformis. My second case supplies the solitary example of one of these abscesses produced by compressing violence to the abdomen. The tables are chiefly valuable as proving the safety and the life-saving effect of the operation of timely incision.

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LITERATURE.

The following list embraces the most important contributions to the subject of late years, omitting single cases that are contained in the statistical table; for a general resume of literature, I would refer to the very complete list appended to Dr. Bull's paper.

1. Roberts Bartholow, M. D. American Journal of Medical Sciences. 1866, Vol. II., p. 35.

2. Willard Parker, M. D. New York Medical Record, March 1, 1867.

3. L. Weber, M. D. New York Medical Journal, August, 1871.

4. William S. Bull, M. D. New York Medical Journal, September, 1873.

5. J. W. S. Gouley, M. D. Transactions of the Medical Society of the State of New York, 1875.

6. Gordon Buck, M. D. Transactions of the New York Academy of Medicine, second series, Vol. II., 1876.

No.	OPERATOR	WHERE REPORTED.
1	Mr. Hancock	Lancet, 1848. vol. II, p. 380
2	Willard Parker	Medical Record, New York, vol. II, p. 25
3	Willard Parker	Medical Record, New York, vol. II, p. 25
4	Willard Parker	Medical Record, New York, vol. II, p. 25
5	Willard Parker	Medical Record, New York, vol. II, p. 25
6	Willard Parker	Rep. by Dr. J. Hobart Burge, Rec., v. II, p. 169
7	Dr. L. Weber, of N.Y.	Record, vol. VI, p. 113
8	Clarkson Freeman	Canada Lancet, February, 1872
9	Dr. Sam. Whitall, N.Y.	Medical Record, vol. IX, p. 255
10	Dr. H. B. Sands, N.Y.	Medical Record, vol. IX, p. 463
11	Dr. Chas. Kelsey, N.Y.	Medical Record, vol. IX, p. 511
12	Dr. Samuel B. Ward	Medical Record, vol. IX, p. 510
13	Dr. Charles Kelsey	Medical Record, vol. IX, p. 649
14	Prof. Weinlechner	Bericht der K. K. Krankenanstalt Wein, 1873.
15	Dr. R. F. Weir of N.Y.	Medical Record, vol. X, p. 861
16	Dr. L. Weber	Medical Record, vol, XI, p. 12
17	Dr. L. Weber	Medical Record, vol. XI, p. 12
18	Dr. L. Weber	Medical Record, vol. XI, p. 12
19	Dr. Gordon Buck	Medical Record, vol. XI, p. 34
20	Dr. Erskine Mason	Medical Record, vol. XI, p. 375
21	Dr. Edgar Holden	Medical Record, vol. XI, p. 825
22	Dr. J. C. Adams	Medical Record, vol. XII, p. 181
23	Dr. Stiegle	Schmidt's Jahrbucher, 1871–73, p. 303
24	Dr. Stiegle	Schmidt's Jahrbucher, 1871–73, p. 303
25	Dr. Kotman	Schmidt's Jahrbucher, 1871–73, 150, p. 37
26	Dr. J. W. S. Gouley	Trans. Med. Society, State of New York, 1875.
27	Dr. E. Krackowizer	Trans. N.Y. Acad. of Med. 2d series, v. II, p. 15
28	Dr. J. P. P. White	Buck's paper in above vol. of Trans., p. 1
29	Dr. J. R. Wood	Buck's Paper
30	Dr. J. R. Wood	Buck's Paper
31	Dr. J. R. Wood	Buck's Paper
32	Dr. J. C. Hutchison	Gouley's Paper, New York Transactions
33	Dr. J. C. Hutchison	Gouley's Paper, New York Transactions
34	Dr. R. B. Bontecou	Transactions New York Medical Society, 1873.
35	Dr. R. B. Bontecou	Transactions New York Medical Society, 1873.
36	Dr. R. B. Bontecou	Transactions New York Medical Society, 1873.
37	Dr. C. A. Leale	Gouley's Paper, N. Y. Medical Trans., 1875
38	Dr. C. A. Leale	Gouley's Paper, N. Y. Medical Trans., 1875
39	Dr. Wm. Bayard, of St. Johns, N. B.	Buck's Paper, Trans. N. Y. Acad. of Medicine
40	Dr. Rauschenberg	Atlanta Med. & Surg. Journal, Aug. 1876, p. 273
41	Dr. J. M. Johnson	Atlanta Med. & Surg. Journal, Aug. 1876, p. 273
42	Dr. J. H. Pooley	This Paper
43	Dr. J. H. Pooley	This Paper
44	Dr. S. D. Turney	This Paper
45	Dr. S. D. Turney	This Paper
46	Dr. A. C. Post	New York Medical Journal, July, 1877, p. 82.

RESULTS.	REMARKS.
Recovery	Two large concretions discharged
Recovery	Small concretion discharged
Recovery	Abscess had partially discharged per rectum; on being opened pus and gas escaped
Recovery	Opened twice
Recovery	Opened by an incision six inches long
Recovery	Incision three inches in length
Recovery	No foreign body
Recovery	Complicated with Phlegmasia Dolens
Recovery	No pus when first opened
Recovery	Eight or nine concretions discharged
Recovery	
Recovery	No pus at first
Recovery	No pus when first opened
Recovery	Large concretion discharged
Died of Peritonitis	Abscess burst into peritoneum after being opened
Recovery	No pus at first opening
Recovery	Complicated with severe erysipelas
Recovery	Passed pus both by bladder and rectum
Recovery	
Death in 74 days	General Peritonitis
Recovery	
Recovery	
Recovery	Wound closed in eight days
Death from abscess of the lung	Punctured with trocar; no pus. Eight days later punctured again; pus
Recovery	Opened with Vienna Paste
Recovery	Recurrent abscess; the first opened spontaneously
Recovery	Discharge of gas and fetid pus
Recovery	Aspirated twice before a free opening was made
Recovery	
Recovery	
Recovery	
Recovery	
Recovery	
Recovery	
Death	
Recovery	
Recovery	
Recovery	
Death in four months.	Abscess opened when on the point of bursting; several lumbricoid worms discharged
Recovery	Mistaken at first for a hernia
Recovery	Cherry stone discharged
Recovery	Appendix Vermiformis came away with the discharge
Recovery	Of traumatic origin
Recovery	
Recovery	
Recovery	Boy; aet. 12; sick seventeen days when abscess was opened

A SYNOPSIS OF A PAPER,

—READ BY—

DR. XENOPHON C. SCOTT,

— ON —

PURULENT OPHTHALMIA.

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PURULENT OPHTHALMIA.

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By purulent ophthalmia we understand an inflammation of the mucous and sub-mucous membrane lining the lids, and a seroplastic infiltration into the structure of the lids. This is indicated by the great chemosis of the conjunctiva, swelling of the lids and the great secretion of much purulent product of inflammation. This definition holds good whether the disease is purulent ophthalmia, gonorrheal ophthalmia, or ophthalmia neonatorum.

In the beginning there is a sensation of heat and as if a foreign body was lodged in the eye. From the matter collecting and drying on the edges of the lids and eyelashes the lids are glued together in the morning. An examination of the conjunctiva shows it to be very vascular, swollen and of a uniform redness, entirely concealing the Meibomia glands. The lids are red, swollen and generally puffy. At first there is only an increase of tears, but soon the discharge becomes muco-purulent.

Purulent ophthalmia is an advanced degree of catarrhal, and in many cases it will be impossible to say whether we are dealing with a mild case of the former or a severe one of the latter disease. Generally in catarrhal ophthalmia only the conjunctiva is involved, while in purulent ophthalmia not only the conjunctiva but also the sub-conjunc-

tival and the lid structures are involved. To compare these two diseases we have placed their symptoms side by side:

In purulent ophthalmia the congestion of conjunctiva is much greater, involving the superficial, subconjunctival and the tissue proper of the lids.	In catarrhal ophthalmia only the superficial vessels involved, and very rarely the submucous or tissue of lids, and then it is not very pronounced.
In, papilla much more swollen and prominent, and lose their pointed form, and from pressure exerted on each other, become flattened, and look like a part of the conjunctiva and covered with a purulent discharge in great quantity.	In, the papilla are pointed and enlarged. The discharge is mucous or slightly muco-purrulent. Discharges much less, and with shreds of mucous floating in it.
The cornea is much more frequently involved.	Cornea seldom or never involved.
The integument of the lids is so swollen that all its folds are obliterated.	This is never so in the severest cases of catarrh unless it passes on into purulent ophthalmia.
The conjunctiva is often so swollen as to almost conceal the cornea from view.	In catarrh even in the severest cases not so pronounced.
All traces of Meibomian glands are generally obliterated.	There still remain traces of the Meibomian glands.
Purulent ophthalmia involves the conjunctiva, the subconjunctival tissue and structure of the lids. The greater part of the discharge is pus, with some mucous globules floating in it. Discharge much greater in quantity.	Catarrhal ophthalmia is always a superficial inflammation of the conjunctiva with a more or less elimination of the upper layers of epithelium. In the discharge mucous globules are found, and sometimes pus.

Some have considered the swollen papilla as a granular or trachomalous state of the conjuctiva. This is erroneous, for they are not neoplastic formations, but simply an enlargement of pre-existing tissue.

The ulceration and suppuration of the cornea is favored by the swelling and weight of the lids, by the chemosis of

the conjunctiva compressing the vessels supplying its nutrition, and also by the corrosive and noxious effects of the pus or discharges. The discharges in acute purulent conjunctivitis are homogeneous through all the acute stage of the disease, and it is only when the acute symptoms diminish that the discharges become muco-purulent, and finally here and there a shred or filament of the mucous appears. Like all other inflammatory diseases affecting the conjunctiva at first, there is only an increase of lachrymation, but this soon passes into pus. The discharge of purulent ophthalmia is always inoculable, but do not always produce the same identical disease, but the inoculation may be followed by diphtheretic, catarrhal or granular conjunctivitis.

At the beginning there is generally considerable elevation of temperature, itching, smarting, and pain, but these usually abate when once the discharge has become purulent. If pain continues, there is always danger of a diphtheretic or corneal complication. Unless the patient is of a very irritable or nervous temperament, the disease often runs its course without any constitutional symptoms. Purulent ophthalmia may be cured spontaneously in from fifteen days to three months without leaving trace behind on the conjunctiva. Unfortunately such cases are rare, and unless the patient has proper treatment, the disease will end with destruction of the eye, or pass on into chronic purulent conjunctivitis, requiring a long period of treatment before a perfect cure is established. Chronic purulent conjunctivitis may at any time become acute. In acute purulent conjunctivitis there is always the greatest danger of corneal complications. Generally in every severe case there is more or less affection of the cornea under the form of serous infiltration or ulceration of its tissue. Should an infiltration or ulceration of the cornea take place at an early stage in the disease, it is much more serious and dangerous than if it occurred later. The ul-

ceration may terminate in two ways. The process of destruction may be arrested, and a regeneration of tissue take place, or a perforation of the cornea may follow with its sequences. If regeneration takes place, the yellow border which surrounds the ulcer diminishes in size, and presents a grayish appearance, and at the same time, blood vessels are seen moving direct from those of the conjunctival and subconjunctival direct to the ulceration. As soon as vascularization has commenced, a layer of epithelium is found over the floor of the ulcer. Under this layer of epithelium the process of repair becomes complete. If the ulcer is not of great extent and depth, restoration and transparency of the cornea may be apparently perfect. When perforation takes place there is always a sudden escape of hot fluid from the eye, and a cessation of pain.

The dangerous character of an ulcer increases with its extent; as the perforation will be in proportion in size. As a result of perforation we may have a prolapse of the iris; union of the iris with the posterior surface of the cornea; opacity of the cornea; displacement or obliteration of the pupil; the lens may fall forward in the protrusion causing a great obstacle to re-union; in rare cases the inflammation may extend to the deeper structures and total loss of the eye. The iris may become agglutinated with diseased cornea, and the cicatrix formed is not strong enough to resist the intra-ocular pressure and a staphylomus of variable extent is formed. Such are the results of a little ulcer, and why it is necessary to draw so unfavorable a prognosis from such a complication.

Ulceration of a certain depth and extent, can only be restored by either an artificial or natural perforation. When perforation has taken place, intra-ocular pressure having almost ceased, regeneration generally begins immediately, and at the edges of the ulcer.

Pus in the anterior chamber is exceedingly rare in purulent conjunctivitis, nor does the inflammation frequently extend to the iris or deeper structures of the eye, even

when the cornea is involved to a large extent. Attention should be called to the fact that there now and then is formed, in purulent ophthalmia, corneas, perfectly transparent, which have a loss of substance of several layers of epithelium; most frequently at the center of the membrane. On account of there being no change in the transparency of the cornea, and distinct and clear vision, the loss of substance frequently escapes observation. This epethelial abrasion is soon followed by a little facet in the corneal tissue, which spreads in depth and extent by an insensible destruction of tissue, and little by little, the process has reached one-half through the thickness of the cornea, it becomes opaque yellow color, and the bottom of the ulcer will be found covered with necrossed corneal tissue. As soon as the deeper parts of the cornea is involved, and perforation is imminent, this necrossed tissue disappears, and the ulcer becomes clear and transparent again, and at the same time the thinned and weakened base of the ulcer is pressed forward by the intra-ocular pressure and fills up the space left by the loss of tissue. This circumstance joined to the perfect transparency of the protruding fold, causes the impending danger of even a large perforation to escape observation.

The perfect acuity of vision is deceptive. Quietude soon disappears, and perforation takes place. In rare cases regeneration may take place, but generally there is a complete loss of the eye, or cure takes place by a dense leucoma. In large perforations the whole contents of the eye may be evacuated, and phthisis of the eye ball follow. In some cases the inflammation of the conjunctive diminishes and the facet fills out; but to do this it is necessary that the facet should not have reached the deeper corneal tissue. In case of regeneration the ulcer loses its transparency and becomes of a grayish color, free from necrossed corneal tissue, and gradually the cornea becomes vascularized, and the ulcer is covered by epithelium, and restoration is completed under it.

A dangerous kind of an ulcer appears in a crescentic form as if scratched with a finger-nail. It increases in depth, its edges become soon infiltrated, and of a yellow color; and rapidly extend further and further around the cornea. On account of the chemosis of the conjunctiva, and its proximity to the perifary of the cornea, it is overlooked. The facility with which the cornea becomes implicated is the principal and great danger of purulent conjunctivitis. Contagion is the most frequent cause of purulent ophthalmia, and especially is this here in gonorrheal and ophthalmia neonatonia. In making mention of these two forms of purulent ophthalmia, I do not wish to be understood as considering them as distinct forms of disease, or that they become a special description; for there is nothing to distinguish them from any other form of the disease. The pathology, treatment and results are the same, nor can it be admitted that they are more malign than simple purulent conjunctivitis. The condition of the subject and conjunctiva which receives the pus, will have a great influence upon the malignity or benignity of the inoculation. If only one eye is affected, the inoculation of the healthy eye should be prevented by means of a hermetical bandage, consisting of a pad of charpie, applied to the eyelids, covered by a diachylon plaster, and this bound down so as to exclude everything.

This dressing should be removed twice daily; the eye cleansed and carefully examined. If there is any redness or irritation, or swilling, or discharge from the conjunctiva the pad should be discontinued, and a weak solution of nitrate of silver, and cold compresses applied at once.

The possibility of the air being the means of contagion, on account of the small particles of dried pus suspended in it, is little in accordance with the experience of those who have had much to do with this disease, for when it does appear, the cause will generally be found more direct, and we will have no need of blaming the air. On account

of the frequency of gonorrhea, and the facility with which it can be inoculated led some of our old authors to consider it as a metastasis, when purulent conjunctivitis affected persons who had gonorrhea, especially when by chance there was a diminution of either the urethral or vaginal discharges. In such persons it is almost universally the right eye that is first affected, and this is a strong argument for direct contagion, and against metastasis. Although contagion is the most frequent, other causes may produce this disease.

Acute catarrhal ophthalmia may become purulent; affections of the lachrymal passages may produce purulent ophthalmia, but generally such cases are chronic and naturally benign. Sometimes the disease appears as an epidemic. Acute, granular and diphtheretic ophthalmia, are cured by these diseases becoming purulent.

Acute granular ophthalmia may be confounded with purulent ophthalmia. In granular conjunctivitis

The serous infiltration much less intense.	In purulent conjunctivitis the serous infiltration much more intense.
The conjunctival and subconjunctival vessels, although enlarged do not show less turgessence.	There is a greater swelling of the conjunctival and subconjunctival vessels.
The papilla of the conjunctiva are less prominent.	The popilla of the conjunctiva are more prominent.
The existence of little lenticular elevations pale and wanting in blood vessels or granulations.	The absence of granulations.
The congestion of the conjunctiva not so intense, and the discharge less copious and thick.	Greater congestion. Discharges copious and thick.

Purulent conjunctivitis may be confounded with diphtheretic, and the different points of diagnosis are as follows:

In diphtheritic inflammation the same tissues are involved, but there is much less tendency of exudation towards the conjunctival surface than into the deeper tissues of the lids.	In purulent inflammation the same tissues involved. Greater exudation from the conjunctival.
The infiltration in the conjunctival, subconjunctival tissue and parenchyma of the lids, coaguable and fibrinated.	The infiltration of a serous character.
The lids are hard, a pale yellow or waxy appearance, and excessively painful.	Lids soft, a red color, and not very painful.
Mucous membrane thick, hard, glistening and dirty yellow color; bleeds with difficulty on account of the stasis and constriction of the blood vessels produced by the coagulated fibrinated infiltration.	Mucous membrane is succulent, red, and bleeds freely.
Mucous membrane covered by a dense fibrous exudation or membrane which is not only on but extends in to the conjunctival and subconjunctival tissues and also the lids proper. Almost impossibility to separate this false membrane from the conjunctiva.	No exudated membrane covering the conjunctions.
Conjunctiva may be entirely destroyed. Upon deep scarifications little or no blood flows from the incision.	Conjunctiva never destroyed. The greatly swollen conjunctiva has a tendency to spontaneous hemorrhage.
Lids everted with great difficulty and with great pain.	Lids easily everted, and with scarcely any pain.
Discharge grows and a dirty gray color with floating particles of lymph suspended.	The discharge purulent and excessive.

Sometimes scars remain in the conjunctiva after diphtheritic and acute granular conjunctivitis, and thus permit of a retrospective diagnosis, for this never occurs in purulent diseases. In purulent conjunctivitis the eye left to itself is generally destroyed, but the prognosis is much more favorable under proper treatment, and especially when not complicated with diphtheria. This complication is always to be found when the lids become stiff, and the conjunctiva is pale and there is little discharge, and until the conjunctiva takes on an inflammatory vascularization, this danger does not disappear. Some believe that purulent conjunctivitis following gonorrheal inoculation has a less favorable prognosis, supposing that there is a greater liability to a diphtheritic complication. This doctrine we are not willing to subscribe to. For its belief it is necessary to ascribe to and look upon gonorrhea as being produced by a specific poison, but every one knows that such is not the case. Gonorrheal ophthalmia is simply a purulent inflammation of the conjunctiva; its pathology, treatment, and prognosis are the same as simple purulent conjunctivitis. The same is true of purulent conjunctivitis met with in new-born children. The dividing of purulent conjunctivitis into different forms by authors has only brought confusion and done no good at all.

An intelligent, and rational and suitable employment of astringents, especially nitrate of silver, renders this disease almost free from its dangers. Although opponents have appeared against this mode of treatment, so simple and profound, it is only because they have not considered well the subject, and have applied the astringent at an improper time. Immediately after the application there is momentarily an increase of congestion; soon this is followed by a contraction of the blood vessels, and an acceleration of the retarded circulation of the conjunctiva. The copious serous exudation which follow the cauterization is a great relief to the serous infiltrated conjunctiva.

It is an error to employ nitrate of silver as a caustic, either in the form of the mitigated stick, or as strong solutions; nor should it ever be dropped into the eye, but applied to the conjunctival surface of the lids, after they have been thoroughly everted and cleansed by means of a camel hair brush; and afterwards wash off with the same brush any superfluous quantity there may be of the astringent.

By the use of strong caustics, applied to the lids, or of instillation, there is always danger of destruction of the corneal epethelium, and thus favoring complications of this membrane.

It is sufficient to cauterize the conjunctiva of the lids, and of the fornix; that portion belonging to the bulb should never be cauterized, as it is only affected secondarily in purulent conjunctivitis, and its swelling and congestion disappears as the inflammatory phenomenon diminishes in the conjunctiva of the pulpebra. We cannot too strongly condemn the use of nitrate of silver, in either the form of the solid, or the mitigated stick; and do not believe that it should even be applied in stronger solutions than five or ten grains to the ounce of distilled water.

Solid nitrate of silver, or the mitigated stick, in the hands of those not accustomed to use it, is liable to produce destruction of the conjunctiva, and scars which will greatly impair its functions. To apply the weaker solution as above recommended, the lids should be as thoroughly and carefully everted as possible, and the conjunctiva of the palpebra, and the cul-de-sac perfectly cleansed, and then the astringent should be applied by the means of a camel hair brush, to every portion of the palpebral conjunction and fornix. Immediately after the application, as its effects are instantaneous, the superfluous amount of the astringent should be washed off, in order to prevent it having an injurious effect on the ocula conjunctiva and the cornea. By this means the astringent effect is entirely localized. The immediate effect of the astringent application, is an increase

of temperature, and secretive and inflammatory symptoms, but these soon diminish and remain so for a little time. Unless there has been a removal of the astringent application, this abatement in the inflammatory symptoms will be followed by a recrudescence, and a return of the condition existing before the treatment. The contraction of the blood vessels, which is the secondary result from the use of an astringent, is accelerated and assisted greatly by the means of cold.

There are other means besides astringents which will provoke momentarily an augmentation of congestion, but they do not produce the necessary serous transudation of the slight eschar formed.

Dilute acids or weak solutions of alkalies will increase congestion, but they will not bring about a reaction suitable to diminish the swelling of the congestion. In following this treatment, two errors are to be avoided which may compromise its success. The application of astringents should not be too frequent; if too short a time has elapsed and the epithelium has not been restored, the medicine will act upon the conjunctival tissue proper, and although the disease may be promptly cured, it will always be by sacrificing a part of the conjunctiva. The eyes will be irritable, and prone to take on diseased action of the cicatrices which result. This is a great reason why solid nitrate of silver, or the mitigated stick should not be used, for these preparations act as a strong caustic, causing a thick slough, which is thrown off with difficulty, and there is danger with all possible care of destroying the superficial layers of the conjunctiva.

Too much time should not elapse between the applications; for the disease may have recovered from the abatement which followed the previous treatment. If this has taken place, the second cauterization will have the same effect as the first, and no advance has been made towards a cure. The treatment should be repeated as soon as the

epithelial layers have become re-established, and before swelling of the conjunctiva, and an increase of the conjunctiva have reappeared, which existed prior to the previous cauterization. It is only by doing in this manner that a favorable result is obtained. I cannot indorse the doctrine that in an acute affection of the conjunctiva which is liable to be purulent conjunctivitis, that we should wait before making any cauterization, to see whether the disease will complicate with diphtheria or not. In new-born we seldom meet with diphtheretic conjunctivitis.

If the diagnosis is uncertain, astringent applications should be made with caution. Cold is not at all contra-indicated, but should be continually employed. In making the astringent applications they should be applied to every part of the conjunctiva of the palpebra and fornix. Often there is a failure in the treatment on account of neglect to treat the cul-de-sac of the upper lid, which is always difficult to reach. The patient looking in an opposite direction to which the lid is turned, will expose this portion of the conjunctiva and avoid this difficulty. Each lid should be turned separately, and the application made to each separately. When it is time for a new application, the diminution of the swelling may not give a sufficient indication as its determination is sometimes quite different, and therefore, it is better to take for a basis of opinion the increase of secretion and congestion of the eye, which follows the period of remission.

Immediately after the application, there is some pain, accompanied with heat, smarting and abundant lachrymation; and sometimes difficulty in opening the eye-lids. This is soon followed by a period of remission of these symptoms. In a short time after the cauterization, there is quite an abundant muco-purulent discharge containing white shreds of the slough. This secretion continues until the entire eschar has been thrown off, and then gives place to a purulent secretion much more abundant than before the

cauterization. During the period of remission, the swelling diminishes; the lids are less puffy, and can be opened with more facility; the pain almost entirely disappears, and there remains only a sensation of weakness of the lids. Sooner or later, unless prevented, there is an increase of secretion, the puffiness of the lids return, and with it the former suffering. The increase of the secretion is the best indication that the time for a new cauterization has arrived. Generally once in twenty-four hours is frequent enough to make these cauterizations, but now and then are cases when the separation of the eschar, the regeneration of the epithelium, and phase of recrudescence follow each with such rapidity, that it is necessary to cauterize twice in twenty-four hours, to bring about a cure. It is quite necessary to observe carefully the congestion and vascularization in different cases, to be able to judge in advance in what manner and how frequently these applications should be made. There are cases when the slight vascularization and slow separation of the slough, only requires treatment once in thirty-six or forty-eight hours.

At the commencement of purulent conjunctivitis, treatment is generally only necessary once in twenty-four hours, and when the inflammatory symptoms have diminished, the period between cauterizations may be lengthened out. Any corneal complication is no contra indication for such applications, for so long as the purulent conjunctivitis exists fully developed, there is no hope that the corneal affection will retrograde and disappear; for this reason it is necessary to attack the purulent conjunctivitis in order to try to cure at the same time the corneal affection. As there are no means surer and more efficacious against purulent conjunctivitis than nitrate of silver, it should be employed at once, in spite of any corneal disturbance; exercising caution, and the superfluous quantity being washed of or neutralized.

It is true the rubbing of the slough over the affected cornea is an inconvenience, but this should not be considered when compared with the advantages derived.

The strength of the application should never be stronger than five to fifteen grains, to the ounce of distilled water, and the strength of the remedy should be proportioned to the swelling and chemosis of the mucous membrane. At the same time the chemotic conjunctiva, especially that portion overlapping the cornea, should be scripped and scarified with scissors, and cold should be applied to hasten the separation of the eschar.

There is no doubt as to the efficacy of this treatment, and it requires no great dexterity on the part of the physician to follow it out. With very little practice these applications can be made with perfect security and ease. The applications should always be made with a camel hair brush after the lids have been thoroughly everted and cleansed. We cannot too strongly condemn the filthy and bad practice of dropping strong astringent lotions into the conjunctival sac.

Cold is the second remedy of importance in the treatment of purulent conjunctivitis. At the beginning, compresses dipped in ice water, or laid on ice, should be continually applied, and frequently replaced as soon as they become the least warm. When the swelling and congestion of the conjunctiva has diminished, it is not necessary to continue the cold compresses more than an hour or two at a time, two or three times during the day; and finally, it will be only necessary to apply cold immediately after the cauterization, and then to discontinue it as soon as pain ceases.

The frequent changing of the compresses assist in cleansing the eye, and prevents the cornea from the corrosive effects of pus, which will otherwise continually bother it. The eye in addition should be cleansed every half hour by means of a soft sponge. I cannot too strongly condemn the use of a syringe for this purpose, for it is both very painful to the patient, and dangerous to the attendant who uses it. The frequent cleansing of the eye is not necessary if the secretion is scant. Often in purulent ophthalmia of

new born children, the cold compresses are of so much efficacy that they bring about a cure without use of any other means.

Scarifying of the ocular conjunctiva, especially that overlapping the cornea, and thus directly lessening the amount of blood, is an important adjunct in the treatment. These scarifications should be made immediately after the cauterizations, for at that time the congestion of conjunctiva is greater, and more blood can be obtained, and it will assist in hastening the diminution of the slight eschar that is always formed after cauterization; and the pain will be lessened. These scarifications should never be made before a cauterization, and should be very superficial, for otherwise there will be a great danger that when the next application takes place it will penetrate too deeply, and produce cicatrices in the conjunctiva tissue. Scarifications are especially, efficacious in purulent ophthalmia of new born children, where the conjunctiva is greatly engouged. The flow of blood may be kept up for some time by the application of hot compresses, or if no corneal complication is present, by rubbing the lid. They should be abandoned as useless as soon as the chemosis and swelling has diminished, and the inflammatory symptoms have lost their intensity. We cannot too strongly condemn the proposal to excise any portion of the swollen conjunctiva, there will always be the greatest danger of producing annoying scars, or there may be a production of granulations over the excised part which will prevent the rapidity of the cure.

Chemosis is only a serous infiltration in conjunctival tissue, and can be removed fully as well by scarifying as by an incision of this tissue, and besides it is not every case of chemosis that requires so heroic a treatment as even scarifying. When there is a corneal complication present the greatest care should be exercised; the eye should be always examined carefully, and the lids should receive no useless pullings or turnings, and all pressure should be

avoided. Should any signs of an abscess or ulcer appear in this membrane, a solution of atropine, from two to four grains to the ounce of water, should be instilled into the eye six or eight times, daily. By so doing the intra-ocular pressure will be lessened; it will act as an anodyne to the corneal tremo; dilate the pupil and paralyze the intrinsic muscles, and thus put the eye at rest, and the diseased membrane in a better condition to take on a healing process and cure. Diminution of the intra-ocular pressure is of the greatest importance in abscesses and ulcers of the cornea, since the weakened ulcerated part bears the same pressure as the healthy normal portion. The intra-ocular pressure being too great for this diseased part, prevents regeneration and favors destruction.

If the cornea is overlapped by swollen conjunctiva, it should be fully scarified by scissors, and thus relieve it from any conjunctival pressure. In ulceration of a certain depth the bottom is placed under such a condition, that a cure cannot take place unless there is a relaxation of this pressure for a period of time. When perforation takes place with the escape of the aqueous humour, intra-ocular tension is reduced to the minimum. Such being a fact when an ulcer has reached a certain depth, it is better for us not to wait and trust to nature, but to make an artificial opening. A paracentesis should be made through the bottom of the ulcer or abscess, and the contents of the anterior chamber evacuated as gently as possible. By an artificial opening the loss of substance will be much less than if nature does it; nor will it be so sudden, or bring with it the danger to the eye; and, besides resulting opacity will be much less after an artificial perforation. It may be necessary to repeat these perforations several times, if the ulcer should present a threatening aspect or depth. Then we will succeed in curing ulcers without scarcely leaving any trace behind, while if left to nature, and the perforations are repeated, there is always a lucoma of greater or less

extent; for when spontaneous perforation takes place at the bottom of the ulcer, the part surrounding the ulcer are too necrosed and destroyed for regeneration, and consequently, there results an opacity which would have been much less if paracentesis had been made.

If the next day after a paracentesis, a new paracentesis is necessary, it is generally possible by pressing with a probe or spatula lightly upon the neighboring parts of the former opening, which has become closed. It is true that after paracentesis that the iris lies against the opening and by their union autenis symchia may result; but this attachment is not of much importance, for it disappears generally of its own accord, after a production and reaccumulation of a new supply of fluid in the anterior chamber. If it does not happen it will disappear by the use of some mydriatic or mystic remedy depending on the location of the perforation. Paracentesis is not made in ophthalmia practice half as frequent as it should be.

We have no treatment to be compared to it in ulceration or abscess of the cornea. There should be no hesitancy in making a paracentesis when an ulcer has reached a certain depth and extent. If prolapse of the iris is already present, the herneal portion should be excised if it is impossible to reduce it. If the lens should be found in the irritic protrusion, it should be removed at once. In such cases if the inflammatory process has not extended to the deeper eye structures, the cornea may heal with sufficient transparent tissues to justify the making of an artificial pupil, and thus giving sometimes very good sight.

Leeches, (six to twelve in number), applied to the temple about an inch from the outer canthus, or upon the one near the inner canthers will be of great benefit. They should never be applied directly to the lids. The after bleeding should be kept up for an hour or two, by means of compresses or sponges dipped in hot water and frequently applied. In almost any case the outer canthus of the lids can be divided with benefit.

In a few words the treatment of purulent conjunctivitis consists in perfect cleanliness; the application of astringents, of which there is none equal to nitrate of silver. (Five to fifteen grains to the ounce of water). These applications should be commenced at once, and never employed by dropping them into the eye. Cold ice compresses should be used continually. Scarifications and cold compresses are especially indicated after cauterizations. Scarifications should not be before the cauterization; nor should it be too deep. Swollen conjunctiva, especially that overlapping the cornea, should be freely incised with scissors. Applications of the astringent should be repeated as soon as there begins to be an increase of heat and secretion from the lids. Leeches should be applied to the temple. If the cornea is attacked, treatment must be continued with the addition of solution of atropia, and a paracentesis of the membrane, and cauterizing of the lids should be made if necessary.

The author of the above paper regrets exceedingly that the original condensed paper was lost in trasmission through the mails, and he feels that the hurried manner this paper has been completed does not do full justice to the original paper as read before the Society.

Cleveland, Ohio, Oct. 5, 1877.

ON THE PREVENTION

OF THE

SPREAD OF SYPHILIS,

BY

C. S. MUSCROFT, M. D.,

Surgeon to Cincinnati and St. Mary's Hospitals.

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Gentlemen of the Ohio State Medical Society:

On the twelfth day of March last, on delivering a valedictory address before the Academy of Medicine of Cincinnati, as the retiring president, the chief part of the essay was upon the importance of the prevention of syphilis, and so profoundly am I impressed with the importance of the subject, I wish also to call the attention of this society to it.

That syphilis has existed from the earliest ages of society, where the promiscuous intercourse of the sexes has been common, is proved beyond a doubt, and that it will continue in like circumstances is quite certain, and I believe where this condition is present, venereal diseases are constantly being created, and both cases of syphilis and gonorrhea have come under my personal observation which I could not satisfactorily account for in any other way.

The subject of the prevention of the spread of venereal diseases is now occupying the serious attention of many of the leading medical men and philanthropists of our times. Professor Gross, in his inaugural address to the American Medical Association in the year 1874 selected syphilis in its relations to national health, and its deteriorating influence upon the human race. Noble efforts have

also been made by several of our own States, which have endeavored to enact laws for the suppression of venereal diseases.

Whilst it is true that in our country these efforts have not been crowned with the success their great importance deserve, it is not less imperatively our duty as medical men still to make every exertion to that end.

It is not necessary for me to more than merely allude to the terrible mortality of syphilis, as every member of this society is fully acquainted with the facts relative to it. It undoubtedly in its different forms is attended with a greater death rate than all other diseases; it is true, for a time, epidemics may carry off many thousands in their visitations, but these occur but rarely, while we have syphilis constantly among us. I would like to say much more upon the statistics of the mortality from this malady, but the rules of this society will not admit of a volunteer paper occupying more than twenty-five minutes for its delivery.

In order to make any attempt for the suppression of this vice effective, I deem it necessary, first, to educate, as far as possible, the general public to understand to what extent venereal diseases exist, how alarmingly fatal they are to human life, and by what a horrible degree of suffering they are accompanied, that their effects upon the system are entailed upon the offspring, and, when once acquired, are seldom or never eradicated from the system.

Dr. Cressler says: "Hitherto, reticence has been the policy. This position has been held too long, for it is false in principle and injurious in tendency."

"The day has arrived when the shroud must be removed; when the public safety imperiously demands an investigation into the matter; when those who regard it as a small wrong may see it in its real proportions, and when those who have looked upon it as unmanageable be like undeceived."

In discussing this theme it is impossible to avoid including that of prostitution. "Prostitution," says Dr. Cressler,

"is at war with good government; it is an enemy to honest toil; compromises public health; charges society with paupers and criminals; engenders idleness, crime, and horrible disease."

Can we, as philanthropists make too great a struggle to combat these gigantic evils? or ought we, in a country like this, where there is so much general intelligence among the people, cease to labor where so much good can be accomplished?

I respectfully ask that the society may adopt some suitable plan for the purpose of carrying out the above recommendation, as I feel confident if the general public was better informed as to the nature and fatal tendencies of veneral diseases, they will be more willing to assist in having such measures adopted by law, necessary for their suppression.

In furtherance of the same object, I also ask that a committee be appointed to confer with the State Board of Health, to memorialize the State Legislature at its next session to have suitable laws enacted for the suppression of venereal diseases throughout the State.

The difficulties and opposition to be met with in passing such laws would undoubtedly be very great, as the attempt would necessarily bring up the vexed question of the propriety of licensing houses of prostitution; true, this is a serious and delicate subject, and one that can only be decided by the greatest discrimination and sound judgment. But in countries where such laws are in force, the effect has been to greatly reduce the cases of syphilis, and to improve the general morals of those who are the chief sources of it.

I am particularly desirous that laws may also be enacted, giving the authorities of public hospitals greater control over the inmates, and more especially those affected by this class of diseases, and that all such cases, whether male or female, be detained in the hospital until all possible

chance of local infection is perfectly subdued, and this condition be decided by the medical or surgical attendant.

It would also be better for the good order and discipline of all public hospitals, if the unruly patients could be placed under more restraint than the authorities can at present control, as they now frequently conduct themselves in such an improper manner, and with so much defiance that they are compelled to be discharged from the institution in order to protect the other patients, while they themselves are seriously injured as the result of their own bad conduct. But this is a digression of the main intent of this paper.

Two of our sister States have had the benefit of laws for the suppression of venereal diseases, and while the laws were in force their effects were decidedly beneficial, and the disease on the decline.

In the year 1874, Dr. A. L. Cressler, a member of the legislature of the State of Pennsylvania, introduced a bill in the House of Representatives entitled, "An Inquiry into the Extent of the Social Evil, and the Proposed Remedy." The speech he made on the occasion was rich in the religious and profane history of the existence of venereal disease from the earliest time of society to the present. It was an eloquent, classical and masterly effort, replete with the fullest information. I will give the headings of the different sections of the laws recommended by him; fourteen of which were similar to those in force in St. Louis and New Orleans:

Section 1 provides that a full and complete record of all houses of ill-fame and prostitution shall be made and furnished to the board of health.

Section 2 provides for a board of police commissioners.

Section 3 provides for the suppression of houses of ill-fame, upon the request of the board of health.

Section 4 provides that every woman occupying a private room, will be regarded as a brothel keeper.

Section 5 fixes the salary of the examiner.

Section 6 defines her conduct on the street.

Section 7 provides that no prostitute shall rent a house without the consent of the board of police commissioners.

Section 8 provides that an industrial hospital shall be provided for.

Section 9 provides for the support and maintenance of said industrial hospital.

Section 10 provides for the management of said hospital.

Sections 11 and 12 provide for the regulation of the medical examiners, and defines their powers.

Section 13 has reference to the duties of brothel keepers in regard to prostitutes.

Section 14 relates to the duties of prostitutes and so on.

Section 15 provides for the time the owner or keeper of houses of ill-fame shall allow a prostitute to remain in their house or room, without reporting such inmate to the chief of police.

Section 16 relates to the duties of the medical examiner, and the manner in which he shall make his reports.

Section 17 provides for the notice to be given by each medical examiner in his district to the keeper, or owner, or person in charge of every house of ill-fame, in order to collect the dues provided for.

Section 18 refers to removal of lewd women from one place to another, without a permit obtained from the chief ot police.

Section 19 requires each owner or keeper, or any person connected with houses ot prostitution, to give full information as required in section 1, and also any change that may take place in its ownership, aud the amount of fine imposed for non-compliance.

Section 20 speaks the penalty imposed for harboring unregistered females.

Section 21 alludes to the authority of the board of health to employ all inmates committed to the industrial hospital.

Section 22 provides that no name of any prostitute or lewd woman shall be erased from the records without consent of the proper authorities.

While this code of laws was in force in the city of St. Louis, the report of the police commissioners illustrates to what a great extent syphilitic diseases was abated amongst the prostitutes who were made amenable to it.

Before closing this paper I present a few quotations from Dr. Cressler's report on the subject, as they give fuller and more perfect information than any I am in possession of.

He says, "I will now quote further from the report, and recapitulate a few of the moral effects of the law, which, in my opinion, far outweigh any moral objections which may be urged against it."

"1st. By this report it is shown conclusively that the number of public women have uniformly decreased each year."

"2d. That they are more decorous in their manner in public."

"3d. That the plying of their wicked trade upon the public streets has been almost discontinued."

"4th. That a considerable number of abandoned women have been reclaimed and restored to respectable life, and in several cases married."

"5th. That private prostitution, which often develops into open vice, has been materially checked through fear of the legal consequences when brought home to the offender."

"6th. That juvenile prostitution has been almost wholly removed."

"7th. Disease and death, from syphilitic diseases, diminished two-thirds."

"I now ask, Mr. Speaker, what of such results? Are they not encouraging beyond measure?"

The report further says: "The most enthusiastic friends of the measure could not have hoped for a larger or more beneficent success than has attended its workings during the two years in which it has been enforced. The young

and the heedless have been warned by the police of the consequences of entering a life of shame. The number of prostitutes has largely decreased, and the deaths, formerly so numerous in consequence of a disease concomitant on a life of shame, have in a great measure been prevented."

"We also see a marked decrease in crime, which is another vital consideration."

Statistics relating to the suppression of syphilis in European countries, show more gratifying results than those mentioned above. If other cities of our own country had laws like those of St. Louis, "can any man fail to see the result?"

Many other facts could be brought forward, illustrating the great importance of the suppression of venereal diseases, and the benefit which would accrue in saving human life and health, and improving morals. I do not know of any subject that is of so much importance to civilized society as this, nor do I know of any class of men who can exert so great an influence for good in carrying out the suggestions of this paper as physicians; their knowledge of disease, their great intelligence, their knowledge of human nature, their philanthropy, and experience in life, all particularly fits them for such a duty, and I beseech all to use your influence to carry out the suggestions of this paper.

But a short time after reading the above, I found the following in the *Cincinnati Daily Enquirer:*

"THE SOCIAL EVIL—A ST. LOUIS GRAND JURY DEMANDS ITS REGULATION BY LAW.

ST. LOUIS, June 27.—The report of the Grand Jury refers to the repeal of the social evil law, which was in force here previous to a couple of years ago, and says the crimes incident to the social evil have greatly increased since the repeal of the law. It says that, under existing laws, the police authorities are almost powerless to suppress the

crimes which inevitably flow from the brothels of the city, and the jury declares that the best interests of society demand the re-enactment of the social evil law, with a view to check this vice as much as possible. It is understood the jury found indictments against a large number of persons who rent houses to dissolute women, but as *capiases* have not been issued yet, the names of the indicted parties have not been made public."

———:o:———

DISCUSSION ON DR. MUSCROFT'S PAPER.

This paper elicited quite an animated discussion, in which a number of the members joined, all seeming to feel that something *could* and *should* be done to prevent, if possible, the spread and consequent ravages of this disease.

Dr. Reed, of Toledo, thought that enforced examination of males would be the most efficient means of prevention.

Dr. Noyes agreed in this proposition. If men must visit houses of prostitution, let them go there in order.

Dr. Waddel agreed with the doctrine advocated by some, that the blood of an infected woman might inoculate herself, producing a soft chancre on her genitals.

Dr. Jones, of Toledo, said there was no State board of health, so that part of the paper was null. Was opposed to the plan of Dr. Muscroft, as it might so improve the general health that the Doctors would be ruined, such had been about the local result of the labors of the Toledo board of trade. He thought that laws could accomplish but little, so long as human nature, male and female, continued the same.

Dr. Muscroft thinks his paper needs no defense. People *do* die of syphilis. He gave statistics showing that eighty children out of one hundred affected with hereditary syphilis died. Two millions of the forty millions of people in the United States are affected with syphilis. Some think and

say that patients do not die of syphilis. He related the case of a young man who died from the effects of syphilis within three months from the appearance of the primary sore, and he made out the certificate that he died of syphilis.

Dr. Bramble thinks that syphilis *can* be cured as other diseases, the statement of some to the contrary notwithstanding. He first satisfies himself that he has a case of syphilis, when a patient presents with such ailments. The great trouble he had experienced is in not being able to keep the patient under control until cured. He mentioned Dr. Key as one author who says syphilis *can* be cured.

Dr. Muscroft thinks it may be held in abeyance, but not cured.

Dr. Baldwin said the bulk of the profession do not think it curable. We, by giving mercury, may eradicate all appearances of the disease. Unless we can prevent promiscuous intercourse we cannot prevent syphilis. The Doctor here fortified himself in the statement that so long as we have our passions there will be promiscuous intercourse, by copious quotations from Burns, Byron, Shakspeare, etc., showing from these great minds that, in order to stop this promiscuous commerce between the sexes, man must be gelded. By examining the penis we can make it safe for the second person, but not so in examining the woman, for, owing to the arrangement of the vagina, and area to be examined, we cannot tell after the examination that the woman is not diseased.

Dr. Muscroft thinks that, after once being diseased, the patients are very careful not to return and have promiscuous intercourse again. Like a burned child, they learn caution. He had known men who had been diseased to shun those women for the sole purpose of keeping from getting diseased.

CHLORAL HYDRATE

— AS A —

REMEDIAL AGENT IN PUERPERAL CONVULSIONS,

— BY —

JONATHAN MORRIS, M. D.,

IRONTON, O.

CHLORAL HYDRATE

AS A REMEDIAL AGENT IN PUERPERAL CONVULSIONS,

— BY —

JONATHAN MORRIS, M. D.,

IRONTON, O.

———:o:———

It is not my purpose, Mr. President and gentlemen of the convention, to enter into a discussion of the cause, symptoms, pathology, or general treatment of puerperal convulsions. I take it for granted that the symptoms are clear, plain and unmistakable, and he who sees a case of puerperal eclampsia once, will never be likely to mistake it in a subsequent case for anything else. Its cause is not fully, though tolerably well understood by the profession generally. Its pathology, in my opinion, is still to a considerable degree, involved in obscurity; and its treatment, although in the main rational, is still to a great degree empirical.

In calling the attention of the profession to the use of Chloral Hydrate in this fearful malady, I can do it in no better way than by relating two cases, and the only two cases in which I have used the remedy.

CASE I. August 20, 1876, was called to Mrs. B—, in her fifth labor; had attended her in three previous confinements, through all of which she got along without the least trouble. In her first confinement, I had been informed, she had had convulsions, and the child was delivered by craneotomy.

She was a large, robust, hearty woman, light complexion, fair hair and blue eyes, rather of a sanguino-phlegmatic temperament. Had not seen her during the last three or four months. When I entered the room saw quite a change from her previous condition; skin sallow, but not jaundiced; pulse soft and rather feeble, 68 per minute; bowels quite lax; urine free; did not examine its condition; she had vomited quite freely an acid liquid substance, but always had vomited in labor.

Digital examination revealed labor progressing nicely; os fully three-fourths dilated, with a fine bag of water protruding; rectum entirely empty; so I flattered myself and assured her that she would have a quick and easy labor.

In half an hour the membranes ruptured spontaneously, and the child came forcing rapidly upon the perineum, when suddenly she cried out, Oh! my head; and in the twinkling of an eye she was in a bad convulsion. Upon inquiry I found that she had complained of her head aching more or less for the last two or three months, but still did her own work. For the last two or three days had not complained of her head at all.

I ordered a towel saturated with ice water applied to her head. I sent her husband for chloroform, and had the following prescription filled:

Aqua Cinnamon.
Syr. Simp. aa. ʒi.
Hyd. Chloral ʒiv.
M.

In about fifteen minutes, and before her husband returned, the child was born. While I was attending to the child another convulsion came on harder and more protracted than the first. After separating the child I found there was another. In ten or fifteen minutes she was aroused sufficiently to give her a portion of the medicine, and I ordered the nurse to give her a desert-spoonful. She succeeded in swallowing most of it. In a few minutes she fell into a quiet sleep,

during which time the second child was born, without evidence of pain other than slight restlessness.

In half an hour from the time of taking the chloral she was awakened from her sleep and given a full teaspoonful of the mixture, and she soon went to sleep again. I now delivered the placenta, removed the soiled sheets, applied the napkin, and pinned on her bandage without awaking her. In about fifty minutes she opened her eyes, looked around apparently bewildered, and asked if she would soon be through; I told her that she was entirely through and all was right. She had one more slight convulsion, the effects of which passed off quickly. Soon afterwards I gave her another teaspoonful of the chloral, and in a few minutes she again went into a quiet sleep and slept soundly for half an hour, when she awoke quite rational; had no more convulsions, and made a rapid recovery.

CASE II. Was called to see M. A. B—, an unmarried girl, first labor, December 23d, 1876. Age, sixteen years, height 5 feet, weight 90 lbs., light complexion, fair hair and blue eyes, sanguine temperament.

10 P. M. Found her having slight pains, which she and her mother informed me had been troubling her at long intervals all day. Bowels constipated, with frequent desire to avoid urine; pulse 78. The pains not being sufficient to warrant an examination, I waited two hours, and finding no increase in force or frequency of pains, I ordered her an ounce and a half of castor oil, and left the fourth of a grain sul. morphia to be taken after the oil operated, provided the pains remained about the same, and if they increased to send for me at once.

Was not sent for until the next day, the 24th, at 10 A. M. The bowels had been freely moved, and they had given the morphia, after which she slept about three hours. Pains now somewhat stronger and recurring at intervals of from ten to twenty minutes. Pulse soft and regular and in frequency same as in the night.

I now made a digital examination; the os was undilated, but soft and apparently ready to yield. Parts well lubricated. After again waiting two hours, I gave her another half grain morphia, and ordered them to send for me if the pains increased. She slept uninterruptedly from half past one until four o'clock, when she awoke with tolerably brisk pains coming on every six or eight minutes. At half-past four o'clock I again saw her; found labor progressing; os dilated from one to one and a half inches; membranes protruding, and parts well lubricated; pulse 80, soft and regular; no headache, no nausea.

I again left, telling them I would return in an hour, which I did. When I entered the room it was quite dark, and her mother told me she had had a hard chill, that she thought she would shake the bed to pieces. I called for a light, and on going to the bed saw unmistakable evidence of convulsions. Her pulse still 80, soft and regular. As soon as she could be aroused I gave her 20 grs. brom. potass. In seventeen or eighteen minutes she had another very hard convulsion. As soon as the fit was over I bled her sixteen ounces, and tried to keep her well under the influence of chloroform.

After the bleeding the pulse fell in force, but rose in frequency. I gave her from fifteen to twenty grains brom. potass. every half to three-fourths of an hour, as I could get her to take it, and to every second portion I added the sixth of a grain morphia acetas, and one grain antimony.

The fits continued to recur at intervals of twenty to forty minutes. I applied snow caps to her head, and would occasionly draw her head over the side of the bed and pour a small stream of water on it from a considerable height. I had my partner, Dr. D. C. Wilson, called in, and at his suggestion the catheter was introduced and the bromide increased from twenty to thirty grains. Not more than four ounces of water was drawn off. Neither bleeding, cold to the head, bromide, opium, antimony, nor chloroform seemed to make the least impression upon the force or frequency of the fits, nor did

labor advance anyways encouragingly. At twelve o'clock, p. m., about six hours and a half from the first fit, I sent and had the following prescription filled:

Aqua Cinnamon.
Syr. Toloutina, aa ʒi.
Potass. Brom. ʒii.
Chloral Hydrate, ʒiv.
M.

From the first fit until twelve o'clock she had sixteen hard spasms, and would partially come to herself a few minutes before the convulsion came on. A few minutes before the messenger arrived with the medicine she had what seemed to be the hardest fit of any, making seventeen.

As soon as I could get her to swallow, I gave her a desert-spoonful of the medicine, and in a few minutes she went off into a quiet sleep and slept soundly for about fifty minutes. When she awoke, she looked around the room in a bewildered manner and asked for a drink of water, which was given her with another desert-spoonful of the chloral mixture. In a few minutes she had another slight convulsion followed by slight stupor, but no sturtor; she soon rallied and asked to get up, had a good healthy operation and urinated freely.

I now made another examination, found labor progressing slowly, a tolerably brisk pain came on, and she showed slight symptoms of a fit, in fact had a slight twitching of the muscles of the face and one or two convulsive jerks of the limbs.

I gave her a teaspoonful of the mixture, after which she had no more convulsions; her mind soon became clear, and she bore the labor pains, which were hard and protracted, with remarkable fortitude, which in the end had to be terminated by instruments and under the influence of chloroform.

She had in all seventeen hard and two slight convulsions, one hard and two slight ones after taking the first portion of the medicine. I gave neither chloroform nor anything else after giving the chloral.

This finishes the subject matter about which I started to write, namely, to call the attention of the profession to the use of the Hydrate of Chloral in this frightful and fearful disease, but I cannot close without giving a few words of caution.

The standard authors upon obstetrics tell us to bleed! bleed freely!! bleed boldly!!! bleed heroically!!!! from one arm, two arms, and if you cannot make a sufficient torrent of the vital principle of life flow from both arms, open the temporal artery or the jugular vein, or both. I say, gentlemen, don't do it. Bleeding may sometimes in this complaint be necessary, but butchering, never.

They tell you to hasten delivery by prematurely rupturing the membranes, by forcibly dilating the womb, and if you cannot dilate it fast enough with the various inventions for that purpose, out with your scalpel or bistory and split it, incise it, hack it, until it is forced to yield. I tell you, gentlemen, do no such thing.

If the child presents right and the mother well proportioned, you can afford to give nature a little chance. Wait and watch; handle the womb gently, tenderly, treat it kindly and it will not unfrequently respond quicker and easier than it will under more favorable outward appearances; handle it roughly, and nine cases out of ten you will strike a battery that sends a double charge to the already overcharged brain, the result of which you cannot foretell.

When the parts are prepared and the condition favorable, and if nature seems inadequate to the task, apply the forceps and terminate labor; if that cannot be done, and the case is imminent, then you are justified in performiug craneotomy.

You will pardon me for further extending my remarks, that I may give you the statistics of the cases that have happened in my own practice, none of which have ever been published.

It has been my misfortune to have had sixteen cases of puerperal convulsions. Twelve were primiparous, and four multiparous. Thirteen recovered, and three died. Thirteen

occurred just previous to and during labor, and three after delivery. Six were bled, and ten were not bled; two of those that were bled died, and one of those that were not bled died, and she died in twenty minutes from the time I first saw her. Nine labors terminated naturally; four were delivered by the forceps, and two by craneotomy, and one was not delivered at all, and that was the one that died a few minutes after I saw her, and she was the one that was not bled.

And now I will say in conclusion, that of all the remedies I have ever used, bleeding and chloroform included, none seemed to make any decided impression on the fits, except the Chloral, and its action in the two cases herein reported, was so prompt and decided that I feel like recommending it to the profession, in hopes that others will try its efficacy.

P. S.—Since writing the above I have read Playfair's work on obstetrics, and find that he speaks very highly of Hydrate of Chloral in puerperal eclampsia.

LIST OF DECEASED MEMBERS

OF THE

OHIO STATE MEDICAL SOCIETY,

With Date of Admission and Date of Death.

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Ackley, H. A. . . .	Cleveland . .	1850	
Allen, Peter, . . .	Kinsman . .	1850	
Amos, C. E.	Cleveland . .	1852	
Andrews, F. M. . .	Dayton . .	1862	*Army.*
Angel, E.	Akron . . .	1852	
Arnold, Emil, . . .	Ironton . .	1873	
Baily, J. S.	Freeport . .	1873	1875
Baker, A. H. . . .	Cincinnati . .	1846	1865
Baker, Timothy H. .	Wooster . .	1851	1871
Ballard, H. D. . . .	Findlay. . .		1871
Blackman, G. C. . .	Cincinnati .	1860	1871
Boyle, C. E.	Columbus . .	1851	1870
Boalse, A. N. . . .	Lockburn .	1848	
Boerstler, G. W. . .	Lancaster . .	1846	1871
Bonner, Stephen, . .	Cincinnati . .	1847	1876
Bracken, W. C. . .	Jersey . . .	1868	1872
Brown, B. S.	Bellefontaine .	1855	1873
Brown, E. T. . . .	Logan . .	1849	
Bronson, James, . .	Newton Falls .	1852	
Brennan, Thomas, .	Dayton . .	1855	1858
Bridge, W. W. . . .	Marion . . .	1859	1864
Baggs, James, . . .	Ontario . .	1866	1868
Buckner, Phillip J. . .	Cincinnati . .	1850	
Buckner, Wm. . .	Hamilton. .	1853	
Butterfield, John, . .	Columbus . .	1846	1847
Carey, Abel, . . .	Salem . . .	1852	1872
Carroll, Thomas, . . .	Cincinnati . .	1854	1871
Caldwell, Joseph, . .	Huron . . .	1857	1866
Chamberlain, E. K. .	Cincinnati . .	1847	1847

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Conner, P. S. . . .	Cincinnati . .	1858	1854
Cook, Charles C. . .	Youngstown .	1862	1863
Cook, F.	Atwater . .	1853	1857
Cox, D. A.	New Paris .	1846	
Crook, James M. . .	Dayton . . .	1853	
Crume, P. M. . . .	Eaton . . .	1847	1869
Dawson, John, . .	Columbus . .	1851	1866
Danna, M.		1849	
Dean, W. F. . . .	Milan . . .	1857	*Army.*
Dean, G. A.	McComb . .	1874	1875
Delemater, John, . .	Cleveland .	1850	1867
Dodge, I. S.	Cincinnati . .	1854	1872
Doherty, G. A. . .	Cincinnati .	1868	1873
Dolman, Wm. . . .	Cleveland . .	1852	
Ells, G. E.	Lithopolis .	1849	1867
Farrington, S. H. . .			1875
Foote, H. E. . . .	Cincinnati . .	1854	1871
Fries, George, . . .	Cincinnati .	1862	1866
Fyffe, E. P.	Urbana . . .	1851	1867
Gabriel, R. W. . .	Dublin . .	1854	1860
Gailey, J. D.	Marion . . .	1851	
Gans, S.	Cincinnati .	1861	1864
Gard, B. F.	Columbus . .	1847	1849
Gatson, E.	Morristown .	1849	1868
Gille, L. C. C. . . .	Westville . .	1853	
Green, M.	Cambridge .	1855	1856
Griswold, Wayne, . .	Circleville . .	1866	
Haggott, J. P., . .	Eaton . . .	1861	1862
Haines, Job, ...	Dayton. . . .	1853	1860
Haines, V.	Cambridge .	1853	1865
Hall, W. C., . . .	Fayetteville .	1859	1872
Helmick, G. W. . .	Harrisburg .	1848	
Henderson, W. . . .	Delaware . .	1848	1866
Hopkins, Rudd C. .	Newburg . .	1852	*Army.*
Hornbeck, L. . . .	New Carlisle .	1849	1865
Howard, R. L. . .	Columbus .	1846	
Hughes, J. W. . . .	Berlin Centre .	1858	1869
Hurxthall, F. T. . .	Massillon . .	1849	
Johnson, Wm. . . .	Delaware . .	1850	
Jones, A. B. . . , .	Portsmouth .	1868	1876

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Judkins, J. P.	Cincinnati	1846	1867
Judkins, Wm.	Cincinnati	1847	1861
Kable, W. R.	Bellebrook	1846	1859
Kennedy, J. L.	Batavia	1864	1866
Kineman, J. W.	Ashland	1870	1874
Kreider, M. Z.	Lancaster	1846	1852
Kyle, J. G.	Xenia	1856	1870
Lathrop, H.	Columbus	1846	1849
Lawson, L. M.	Cincinnati	1853	1864
Marshall, N. T.	Cincinnati	1854	
Martin, Joshua,	Xenia	1853	1857
Matson, A. F.	Logansville	1857	1867
McBride, Alex.		1865	1876
McCracken, W. A.	Springfield	1867	
McGuire, W. B.	Waynesville	1848	
McMeans, R. R.	Sandusky	1854	1862
McNeal, F. D.	Canal Dover	1854	
Metz, Abram,	Massillon	1852	1875
Mendenhall, G.	Cincinnati	1854	1874
Merriman, A.	Madison	1853	1867
Mitchell, G. F.	Mansfield	1850	1869
Mitchell, M.	Mansfield	1863	1864
Millikin, Samuel,	Hamilton	1853	
Moore, Jonas,	Marietta	1852	1856
Morehead, W.	Zanesville	1855	1861
Mount, William,	Cumminsville	1853	1866
Mussey, R. D.	Cincinnati	1847	1866
Naw, J. H.	Carroll	1873	1875
Norton, J. C.	Marion	1848	
Oliver, J. Q.	Cincinnati	1854	
Pease, L. T.	Williamsburg	1863	1874
Potter, J. F.	Cincinnati	1854	1868
Purple, J. G.	Brooklyn	1853	
Putnam, J.	Gahn	1873	1873
Reid, J. T.	Fairfield	1864	1864
Risinger, J. F.	Galion	1849	1866
Rigdon, L.	Hamilton	1853	1865
Rives, L. C.	Cincinnati	1850	1870
Rodman, Thomas S.	Cleveland	1852	
Robertson, James,	Perrysburg	1853	1854

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Russell, I. W.	Mount Vernon	1848	1876
Sachse, G. J.	Columbus	1846	1860
Sanders, Moses,	Norwalk	1853	
Shotwell, John T.	Cincinnati	1850	1850
Shædford, R. J.	Midway	1853	1868
Sheppard, W. A.	New Vienna	1856	1872
Silver, D. H.	Columbus	1851	1864
Skinner, J. S.	Columbus	1849	
Sharpe, E. C.	Williamsburg	1859	1868
Smith, Edmund,		1850	1850
Smith, A. C.	Medina	1852	1861
Smith, J. A.	Piqua	1853	1858
Smith, S. M.	Columbus	1846	1874
Smith, Harry,	Mount Vernon	1869	1874
Spillman, Henry,	Medina	1855	1862
Stanton, Benjamin,	Salem	1852	1861
Story, R.	Cleveland	1852	1866
Taggart, T. M.	Dalton	1857	1867
Taliaferro, Wm. T.	Cincinnati	1854	1871
Tappan, Benjamin,	Steubenville	1852	
Thompson, M.	Mount Vernon	1850	1867
Thompson, Robert,	Columbus	1846	1865
Thompson, J. W.	Columbus	1860	1862
Thomas, K. G.	Alliance	1858	1869
Thorn, E.	Yellow Springs	1867	1876
Tilden, D. J.	Toledo	1850	
Tilden, Daniel,	Sandusky	1856	1870
Tullis, J. W.	Troy	1851	
Van Pearse, James,	Columbus	1850	
Van Tuyl, D. R.	South Bend	1850	
Van Tuyl, H.	Dayton	1853	
Wallace, R.	Lewisburg	1861	1865
White, John,		1848	
Wigton, A. E.	Delaware	1861	1862
Weatherby, A. S.	Cardington	1865	1870
Woody, Robert,	Eaton	1863	1872
Woodward, Chas.	Cincinnati	1857	1874

LIST OF MEMBERS

OF THE

OHIO STATE MEDICAL SOCIETY,

With Post Office Address and Date of Admission.

NAME.	P. O. ADDRESS.	ADMITTED.
Adams, D. P.	Columbus	1872
Adams, John M.	Labanon	1874
Adams, John W.	Labanon	
Adams, John M.	Ridgeville	1874
Agard, Aurelius H.	Sandusky	1853
Alcorn, A. W.	Ravenna	1870
Allen, Dudley,	Oberlin	1870
Allen, D. B.	West Liberty	1865
Amick, M. L.	Cincinnati	1874
Anderson, W. S.	Newtonville	1867
Andrus, A.	Westerville	1872
Ayres, J. H.	Urbana	1876
Ayers, S. C.	Cincinnati	1877
Baker, Norman,	Lucas	1858
Ballinger, Wm. J.	Plain City	1864
Barker, Wm.	Attica	1876
Banning, J. C.	Round Head	1876
Bartholow, Roberts,	Cincinnati	1869
Bartlett, E. P.	Genoa	1874
Beach, C. H.	Wellington	1868
Beach, T. D.	Alton	1874
Beach, J. N.	West Jefferson	1859
Beach, A. J.	Belleville	1863
Bell, E. R.	Ripley	1871
Bell, A. E.	Zanesville	1855
Bell, A. W.	Bloomsville	1877
Beagrand, Pierce,	Fremont	1853
Besse, H.	Delaware	1868
Battles, W. S.	Shreve	1858

NAME.	P. O. ADDRESS.	ADMITTED.
Berlin, C. T.	Wapakoneta	1868
Bennett, P. C.	Garrettsville	1870
Bennett, John,	Cleveland	1869
Beardsley, C. E.	Ottawa	1869
Bertolett, W. J.	Shreve	1869
Bertolett, J. B.	Letonia	1870
Bertolett, H. A.	Washingtonville	1870
Berger, S. H.	Toledo	1874
Beverly, P. F.	Westerville	1862
Bishop, J. C.	Middleport	1873
Bishop, L. W.	Maineville	1871
Bishop, S. P.	Delta	1870
Bigney, P. M.	Cincinnati	1871
Bigelow, Asa,	Toledo	1874
Bing, J. P.	Portsmouth	1851
Bington, Joseph,	Williamstown, Va.	1876
Blizzard, S. R.	Huntsville	1860
Blymer, A.	Delaware	1868
Black, J. R.	Newark	1867
Bland, Jerome,	Poplar P. O.	1876
Blesch, P. E.	Columbus	1869
Bond, J. W.	Toledo	1874
Bowers, E. D.	Columbus	1861
Boerstler, G. W., Jr,	Lancaster	1870
Brockett, A. J.	Bristolville	1874
Brown, J. E.	McConnellsville	1873
Brown, S. H.	Dennison	1876
Brown, J. C.	Urbana	1863
Brown, J. A.	DeGraff	1860
Brook, G. W.	Ellsworth	1858
Brooks, J. H.	Brownsville	1854
Bramble, D. D.	Cincinnati	1870
Bryson, C. C.	Millersport	1871
Brainard, A. C.	Orangeville	1870
Brainard, H. C.	Cleveland	1870
Bryant, W. G.	Springfield	1871
Bulen, Joseph,	Grove City	1856
Bricker, W. R.	Shelby	1848
Brinkerhoof, D. H.	Fremont	1853
Buckner, J. H.	Cincinnati	1863

NAME.	P. O. ADDRESS.	ADMITTED.
Buckingham, E. V. B.	Centerton	1874
Burr, J. N.	Mount Vernon	1853
Bunce, Wm.	Oberlin	1864
Butler, G. W.	Columbus	1869
Butler, Geo. O.	Cleveland	1870
Belts, Mrs. Helen L.	Youngstown	1875
Brooks, Mrs. S.	Akron	1875
Baldwin, J. F.	Columbus	1875
Campbell, J.	Dennison	1876
Campbell, W. H.	Vanceburg, Ky.	1871
Caldwell, W. W.	Hamilton	1874
Cadwallader, Rowland,	Findlay	1862
Carmichael, W. A.	Loveland	1871
Cassat, M.	Cincinnati	1870
Carson, Wm.	Cincinnati	1871
Carson, W. B. ,	McComb	1874
Carrick, A. L.	Cincinnati	1871
Chase, B. S.	Akron	1870
Chase, James L.	Toledo	1874
Chamberlain, D. P.	Toledo	1874
Chamberlin, D. H.	Toledo	1877
Cherry, Wm.	Toledo ,	1874
Chisholm, J. W.	Mt. Perry	1873
Clark, Henry P. ,	Ashland	1862
Clark, John H.	Mechanicsburg	1869
Clark, M. S.	Youngstown	1865
Cotton, J. D.	Marietta	1852
Cotton, D. B.	Portsmouth	1872
Coleman, David,	West Union	1872
Coble, D. W.	Westerville	1872
Courtwright, A. P.	Cincinnati	1871
Courtwright, G. S.	Lithopolis	1867
Conklin, W. J.	Dayton	1868
Conklin, H. S.	Sidney	1849
Conner, P. S.	Cincinnati	1868
Constant, W. S.	Delaware	1866
Corson, John,	Middletown	1866
Comegys, C. G.	Cincinnati	1871
Corwell, H. G.	Youngstown	1874
Corey, John M.	Fremont	1874

NAME.	P. O. ADDRESS.	ADMITTED.
Coldham, James,	Toledo	1874
Casgrove, Thos.	Sylvania	1875
Crafts, John M.	Mantua, Portage Co.	1874
Craig, B. W.	Mansfield	1874
Culver, J. F.	Belpre	1874
Cuykendall, M. C.	Bucyrus	1874
Curry, J. H.	Toledo	1876
Cushing, H. K.	Cleveland	1857
Culbertson, Howard,	Zanesville	1855
Coulson, E. G.	Pennsville	1875
Coleman, N. R.	Harrisville	1875
Chapman, W. C.	Toledo	1875
Cooney, H.	Bryan	1875
Cox, J. M -	South Salem	1877
Cake, W. M.	West Independence	1875
Dawson, W. W.	Cincinnati	1853
Davis, John,	Dayton	1853
Davis, John,	Cincinnati	1854
Davis, O. E.	Cincinnati	1871
Davis, Wm. B.	Cincinnati	1865
Davis, T. D.	Dayton	1872
Dandridge, A. S.	Cincinnati	1854
Dandridge, N. P.	Cincinnati	1871
Darwin, Henry W.	Gettysburg	1859
Dalby, Isaac N.	Cleveland	1870
Day, E. A.		1871
Dew, J. S.	Trimble	1873
Denning, R. M.	Columbus	1851
Dean, Geo. A.	McComb	1874
Dickson, M. M.	Johnstown	1877
Duncan, James A.	Toledo	1874
Denman, M. N.	West Unity	1874
Donahoe, H. J.	Sandusky	1854
Douglass, W. W.	Toledo	1874
Downs, Samuel,	Waterville	1876
Drake, I. L.	Lebanon	1859
Drury, Wm. H.	Columbus	1859
Dunlap, Alexander,	Springfield	1854
Dunlap, A. S.	Dayton	1868
Dunlap, C. W.	Springfield	1869

NAME.	P. O. ADDRESS.	ADMITTED.
Dunham, J. M.	Columbus	1873
Dunun, S. C.	Cheshire	1877
Davy, R. B.	Cincinnati	1875
Ebright, L. S.	Wadsworth	1870
Eckman, Hirman,	Tuscarawas	1869
Edwards, J. D.	Xenia	1867
Edwards, Tom O., Jr.	Wheeling, W. Va.	1873
Ellsberry, W. W.	Georgetown	1874
Erwin, R. W.	Bay City, Michigan	1872
Estep, William,	Lloydsville	1852
Everhard, N. S.	Wadsworth	1870
Ewing, James	Hebrun	1875
Farrell, T. J.	Columbus	1873
Falconer, Cyrus,	Hamilton	1854
Fenneberg, Gustavus	Toledo	1874
Firmin, F. W.	Findlay	1874
Fisher, P. Q.	Nashport	1873
Fisher, W. S.	Bridgeport	1876
Firestone, J. L.	Salem	1870
Firestone, L.	Wooster	1852
Finch, S. F.	Green Springs	1857
Finch, C. M.	Portsmouth	1869
Forbes, S. F.	Toledo	1856
Ford, J. B.	Norwalk	1876
Follett, Alfred,	Granville	1864
Foster, Nathaniel,	Cincinnati	1854
Fowler, S. W.	Delaware	1873
Frizzell, W. A.	Freestone	1872
Frankenberg, O.	Columbus	1873
Franklin, G. S.	Chillicothe	1876
Fuller, A. B.	Loudonville	1868
Fuller, S. W.	Bellefontaine	1853
Fisher, A. W.	Toledo	1875
Gardner, G. W.	Harrisburg	1873
Gay, N.	Columbus	1848
Gabriel, J. F.	Piqua	1856
Galpin, Loman,	Milan	1857
Gawne, A. J.	Cleveland	1870
Galer, Frank. M.	De Graff	1874
Galbraith, E. J.	Frankfort	1876

NAME.	P. O. ADDRESS.	ADMITTED.
Gerwe, F. A. J.	Cincinnati	1854
Gillett, Bartley,	Springfield	1849
Gilchrist, R. S.	De Graff	1856
Gilliam, D. L.	Nelsonville	1873
Gibson, Richard McD.	Tiffin	1871
Gordon, T. W.	Gaorgetown	1849
Goble, P.	Worthington	1849
Gonsaulis, C.	Sparta	1863
Goldrick, Wm.	Delaware	1868
Goodlove, Wm.	Monterey	1874
Goodson, J. W.	Bellevue	1874
Green, J. W.	Fairfield	1853
Green, J. H.	Troy	1871
Gray, S. S.	Piqua	1867
Graefe, Wm.	Sandusky City	1874
Gundry, Richard,	Athens	1856
Guyttard, F.	New Bedford	1870
Glenn, Mrs. G. C.	Akron	1875
Graefe, Phillip,	Sandusky	1875
Greenamyer, P. S.	Smithville	1875
Grissell, E.	Salem	1876
Harley, L. G.	Dalton	1853
Hamilton, J. W.	Columbus	1849
Hart, B. F.	Marietta	1854
Hart, C. A.	Marietta	1877
Harmon, Julian,	Warren	1857
Hall, W. E.	Fayetteville	1859
Hall, C. B.	Millersport	1872
Hall, Camillus,	Burlington	1872
Hazzard, J. S. R.	Springfield,	1867
Harrison, Eugene B.	Napoleon	1869
Halderman, D.	Columbus	1869
Hadlock, J. W.	Cincinnati	1871
Hague, J. H.	Nashville	1874
Hartman, S. Duff,	Tippecanoe City	1874
Hathaway, Calvin,	Edgerton	1874
Hathaway, Harrison,	Weaver's Corners	1874
Helbish, F. S.	Green Springs	1876
Helmick, S. C.	Commercial Point	1873
Helmick, J.	Harrisburg	1849

NAME.	P. O. ADDRESS.	ADMITTED.
Henderson, J. P.	Newville	1850
Henderson, D. W.	Marysville	1856
Henderson, R. A.	Upper Sandusky	1865
Hendrickson, Hugh,	Lewis Centre	1868
Herrick, H. J.	Cleveland	1865
Herrick, L. C.	Woodstock	1871
Heuston, R. C.	Oxford	1868
Heighway, A. E.	Cincinnati	1870
Hill, G. W.	Ashland	1873
Hill, N. S.	Neville	1866
Hill, H.	West Alexandria	1867
Hildreth, C. C.	Zanesville	1853
Higgins, C. W.	Big Plain	1869
Hiner, S. B.	Lima	1874
Hines, Isaac N.	Cleveland	1874
Hixson, C. C.	Hillsboro	1877
Holston, J. G. F., Jr.	Zanesville	1873
Hoover, T. C.	Bellaire City	1873
Howard, E. W.	Akron	1852
Howard, H. C.	Akron	1877
Holston, J. G. F.	Zanesville	1850
Hopkins, D. O.	St. Paris	1866
Hough, J. B.	Ridgeville	1869
Houghton, J. W.	Wellington	1870
Hoff, J. W.	Pomeroy	1872
Holdt, George,	Cincinnati	1871
Hoege, George L.	Fostoria	1874
Hohly, Frederick,	Toledo	1874
Huestis, Isaac,	Chester Hill	1869
Hughes, E. E.	Thurman	1873
Hughes, A.	Sandusky	1877
Hubbard, J. C.	Ashtabula	1856
Hunt, A. H.	Blackleyville	1868
Hurd, A.	Findlay	1870
Huggins, R. D.	West Alexandria	1871
Hyatt, E. H.	Delaware	1862
Hyde, Wm.	Wauseon	1871
Hale, R. W.	Fostoria	1875
Hanford, F. A.	Akron	1875
Hard, E. G.	Medina	1875

NAME.	P. O. ADDRESS.	ADMITTED.
Hovey, A. B.	Tiffin	1875
Holliday, B. W.	Cleveland	1875
Hagus, H. P.	Ravenna	1875
Hirter, Carl,	Sandusky	1875
Hough, W. S.	Cuyahoga Falls	1875
Isham, A. B.	Walnut Hills, Cin'ti	1871
Jacoby, F.	Columbus	1873
Jenner, A. E.	Dayton	1866
Jennings, E.	Dayton	1867
Jennings, J. D.	Sonora	1869
Jewett, W. H.	Hilliard	1869
Jewett, H. S.	Dayton	1871
Jones, T. W.	Columbus	1847
Jones, R. E.	Gomer	1863
Jones, L. M.	West Liberty	1869
Jones, W. W.	Toledo	1849
Jones, J. D.	Newburg	1870
Jones, Philo E.	Wauseon	1874
Jobes, J. A.	German, Darke Co.	1870
Joseph, A. P.	Fairmount,	1862
Junkens, M. W.	Bellaire	1859
Kay, Isaac,	Springfield	1853
Keever, M. H.	Ridgeville	1850
Kennedy, J. C.	Batavia	1854
Keyt, A. T.	Walnut Hills, Cin'ti	1850
Kelley, H. R.	Galion	1868
Kemp, J. D.	Dayton	1868
Kemper, And. C.	Cincinnati	1871
Kearney, T. H.	Cincinnati	1871
Kendig, E. V.	Haynesville	1874
Kincaid, W. P.	New Richmond	1854
Kingham, Joseph,	Port Clinton	1875
Kinnaman, J. W.	Ashland	1870
Kirby, Jacob,	Hillsboro	1871
Kitchen, B. F.	Clay Post Office	1872
Kitchen, H. W.	Cleveland	1874
Kirkley, Cyrus A.	Toledo	1874
Knowlton, A. P.	Olmstead Falls	1870
Knox, C. E.	Bellaire	1875
Kurz, C. E.	Bellaire	1875

NAME.	P. O. ADDRESS.	ADMITTED.
Laisy, Jacob,	Cleveland	1874
Lawless, J. T.	Toledo	1874
Landon, C. P.	Westerville	1851
Lamme, W. H.	Xenia	1853
Larimore, F. C.	Mt. Vernon	1871
Larimore, James,	Newark	1875
Lang, E. R.	Portsmouth	1871
Leonard, B. B.	West Liberty	1854
Lewis, Edward C.	Canal Dover	1870
Lewis, W. C.	Rushville	1869
Lewis, D.	New Haven	1848
Lee, E. B.	Garrettsville	1870
Little, J. A.	Delaware	1868
Linskey, C. H.	Put-in-Bay	1876
Loving, S.	Columbus	1858
Longfellow, A. J.	Fostoria	1861
Loller, W. B.	Nashville	1864
Lord, J. M.	Chesterville	1868
Logan, W. M.	Cincinnati	1871
Lucky, J. B.	Elmore	1874
Luddington, H.	Cincinnati	1871
Ludlow, J.	Cincinnati	1871
Lyman, C. N.	Wadsworth	1852
Longworth, L. R.	Cincinnati	1875
Long, J. W.	Bryan	1875
Mahlman, H. A.	Columbus	1869
Mahlman, C. H. W.	Columbus	1859
Matchett, W. H.	Greenville	1862
Mack, John,	Shelby	1853
Martin, Geo.	Huron	1877
McCann, ——	Napoleon	1875
McCarty, Oliver,	Polk	1858
McCasky, H.	Felicity	1868
McCurdy, John,	Youngstown	1870
McCollum, E. J.	Tiffin	1871
McClure, James,	Marietta	1866
McCullough, J. G.	Bealsville	1868
McCullough, A. M. F.	Bealsville	1874
McDowell, W. J.	Portsmouth	1872
McEbright, Thomas G.	Akron	1866

NAME.	P. O. ADDRESS.	ADMITTED.
McElwe, S.	New Castle	1866
McFarland, J. A.	Tiffin	1850
McGraw, Aaron,	Burton	1869
McGuire, J.	Norwalk	1870
McKinley, C. G.	Sunbury	1866
McKenna, L. F.	Junction City	1873
McKechnie,	Wilmington	1876
McLaughlin, A. C.	Tremont	1852
McLaughlin, R.	Butler	1869
McNally, Thomas,	Chillicothe	1853
McNeely, J. S.	Hamilton	1867
McMillin, Alex.	Genoa	1875
McMann, E. W.	Napoleon	1875
McConnelly, C. M.	Vermillion	1875
McClellan, R. M.	Xenia	1875
McNutt, E. A.	Huron	1877
Mann, H. L.	Wapakoneta	1875
Mead, M. L.	Cleveland	1875
Merrell, A. E.	Vermillion	1876
Musgrove, W. A.	Urbana	1875
Metcalf, C. T.	Warren	1870
Metzler, A. S.	Buena Vista	1874
Myers, Benj.	Ashland	1874
Minor, T. C.	Cincinnati	1873
Miller, A. C.	Orrville	1858
Miller, T. C.	Cleveland	1870
Miller, C. A.	Orrville	1871
Miles, A. J.	Cincinnati	1869
Mitchell, George,	Mansfield	1868
Moe, L. W.	Ottawa	1860
Monahan, A. B.	Jackson	1872
Moore, William,	New Lisbon	1865
Moore, Eugene L.	Moscow	1868
Moore, E.	Warren	1868
Moore, A. C.	Amelia	1869
Moore, James,	Ironton	1872
Morris, Jonathan,	Ironton	1853
Morse, D. A.	London	1868
Morgan, J. B. F.	Clarksburg	1873
Morgan, E. D. S.	Berlin	1872

NAME.	P. O. ADDRESS.	ADMITTED.
Mounts, J. L.	Morrow	1860
Mouser, J. A.	LaRue	1870
Murphy, J. A.	Cincinnati	1872
Muscroft, C. S.	Cincinnati	1854
Mussey, W. H.	Cincinnati	1854
Mullen, T. J.	New Richmond	1855
Murray, L. S.	Medina	1870
Murbach, A. J.	Archibald	1874
Nash, W. H. H.	Quaker Bottoms	1874
Naw, J. H.	Carroll	1873
Neal, T. L.	Dayton	1863
Neil, Alexander,	Columbus	1868
Nicholson, W. H.	Cleveland	1853
Noble, C. D.	Oberlin	1870
Noble, David,	Hillsboro	1860
Nolan, J. G.	Toledo	1874
Norman, Frank,	Columbus	1878
Nourse, J. D.	Reynoldsburg	1873
Nunmaker, H. B.	Columbus	1875
Orr, G. B.	Cincinnati	1871
Owsley, J. B.	Jacksonburg	1871
Osborn, A. L.	Peru	1875
Paige, W. F.	Johnstown	1864
Palmer, C. D.	Cincinnati	1871
Patterson, A. V.	Mansfield	1861
Patterson, Wilson S.	New Lexington	1874
Paul, T. E.	Ottawa	1877
Pearce, Enoch, Jr.	Steubenville	1859
Pearce, H. C.	Urbana	1867
Pearce, L. E.	Cable	1869
Peck, W. V.	New Richmond	1872
Phillips, H. W.	Kenton	1866
Pixley, S. M.	Portsmouth	1873
Pixley, Sumner,	Cleveland	1870
Pollock, Calvin,	Donnelsville	1873
Pomerene, P. P.	Berlin	1870
Pomerine, Joel,	Millersburg	1858
Pomeroy, O.	Chardon	1869
Potter, J. B.	Canal Winchester	1847
Pooley, J. H.	Columbus	1876

NAME.	P. O. ADDRESS.	ADMITTED.
Pratt, E. B.	Mount Sterling	1869
Price, Joseph,	Randolph	1852
Preston, J. C.	Brunswick	1857
Priest, Jonathan,	Toledo	1874
Primrose, J. P.	Nelsonville	1872
Pullen, G. W.	Logan	1864
Pape, Leopold,	Sandusky	1875
Quinn, J. J.	Cincinnati	1875
Ralston, D. H.	Farmer City, Ills.	1864
Rankin, A. H.	Sandusky	1870
Randall, R.	Bath	1870
Raymond, B.	Lancaster	1860
Reamy, T. A.	Cincinnati	1855
Reed, N. C.	Columbus	1873
Reed, C. H.	Toledo	1873
Reed, A. B.	Brooklyn Village	1870
Reed, A. N.	Norwalk	1870
Reed, R. C. S.	Jones' Station	1867
Reed, William,	Iberia	1865
Reed, C. R.	Middleport	1864
Reed, C. A. Lee,	Cincinnati	1874
Reeve, J. C.	Dayton	1861
Reid, J. L.	Van Wert	1874
Reed, J. T.	Massillon	1875
Ridenour, A. W.	Massillon	1875
Ringham, J.	Port Clinton	1875
Riggs, John U.	Bryan	1873
Rice, J. B.	Fremont	1868
Ridenour, W. T.	Toledo	1870
Robertson, Charles,	McConnellsville	1849
Robinson, J. D.	Wooster	1856
Robinson, J. N.	Medina	1856
Robb, M.		1871
Rodgers, J. H.	Springfield	1859
Rogers, Robert,	Springfield	1847
Rogers, J. G.	New Richmond	1853
Root, H. A.	Toledo	1874
Root, E. B.	Painsville	1874
Ropp, W. T.	Delaware	1869
Rosenfeldt, A.	Cincinnati	1871

NAME.	P. O. ADDRESS.	ADMITTED.
Russell, I. W.	Mt. Vernon	1870
Runyon, ——	West Unity	1874
Salisbury, J. N.	Russellville	1872
Saylor, Will,	Gratis	1871
Scarf, W. D.	Bellefontaine	1855
Schwab, Louis,	Portsmouth	1872
Scoville, S. S.	Lebanon	1859
Schueller, J. B.	Columbus	1869
Scott, A. J.	Loudenville	1870
Scott, Xenophen C.	Cleveland	1874
Scott, W. J.	Cleveland	1855
Schnetzler, H. M.	Toledo	1874
Seaton, A. M.	Medway	1869
Seely, W. W.	Cincinnati	1871
Seeds, R. Z.	Hilliard	1873
Seldon, Robert,	Shanesville	1870
Sensaman, H.	Tremont	1871
Sellers, A.	Lebanon	1867
Severance, R. A.	Bellevue	1874
Shepherd, W. E. W.	Nelsonville	1873
Shepherd, W. W.	Hillsboro	1871
Shackelton, E. L.	Auburn, Placer Co. Cal.	1871
Shoemaker, J. M.	Napoleon	1869
Shouse, B. A.	Berne	1868
Sinnet, E.	Granville	1850
Silver, D. R.	Sidney	1870
Sidwell, N. H.	Wilmington	1871
Slocum, Charles,	Defiance	1874
Smith, S. D.	Lockington	1874
Smith, C. T.	Middleport	1873
Smith, J. H.	Delaware	1873
Smith, J. W.	Wellington	1868
Smith, D. B.	Cleveland	1870
Smith, James,	Clarington	1876
Snyder, D. J.	Scio	1850
Southard, J. M.	Marysville	1860
Sparrow, T. R.	Columbus	1873
Spencer, B. T.	Newark	1873
Spees, S. J.	Hillsboro	1868

NAME.	P. O. ADDRESS.	ADMITTED.
Sprague, James,	London	1866
Stein, Geo. T.	Columbus	1873
Steely, E. E.	Anna	1877
Stephenson, Y.	Georgetown	1872
Stephenson, J. H.	Leesville	1860
Stark, W.	Cincinnati	1871
Stephens, E. B.	Syracuse, N. Y.	1853
Stillwell, Thomas,	Fremont	1857
Stanley, E.	Sandusky	1870
Stansell, J. A.	Forest	1866
Stockstill, J. W.	New Carlisle	1867
Stewart, S. H.	Columbus	1869
Stewart, G. P.	Cincinnati	1877
Steeley, H. G.	Sidney	1869
Stanton, Byron,	Cincinnati	1871
Sweeney, R. L.	Marion	1859
Sykes, W. H.	Plymouth	1870
Smith, W. K.	Deersville	1875
Sauer, Mrs. P. B.	Napoleon	1875
Tagert, E. Curtis,	Hilliard	1871
Tauber, B.	Cincinnati	1876
Taylor, James L.	Wheelersburg	1872
Taylor, W. H.	Cincinnati	1874
Thompson, J. C.	South Bloomfield	1848
Thompson, J. B.	Columbus	1846
Thompson, W. R.	Vandalia	1871
Thorn, S. S.	Toledo	1873
Thornton, W. P.	Cincinnati	1871
Thurston, R. C.	Oxford	1868
Tipton, R. H.	Darbyville	1853
Tichenor, E. J.	Lebanon	1869
Turney, S. D.	Circleville	1856
Tupper, C. E.	Ottawa	1874
Underwood, A. H.	London	1869
Underhill, J. W.	Cincinnati	1874
Vail, D. W.	New Haven	1874
Vanatta, E.	Fultonham	1855
Vance, D. M.	Urbana	1876
Vandervort, J. W.	Harveysburg	1864
Vattier, J. L.	Cincinnati	1850

NAME.	P. O. ADDRESS.	ADMITTED.
Vaughters, Thomas G.	Portsmouth	1872
Voorhees, S. R.	Mason	1873
Waddick, J. M.	Toledo	1873
Waddle, Thomas,	Toledo	1874
Wade, D. E.	Cincinnati	1854
Wagenhals, P. M.	Columbus	1869
Waggoner, Joseph,	Ravenna	1870
Walton, George E.	Cincinnati	1871
Wangman, A. L.	Tiffin	1877
Ward, C. S.	Warren	1875
Wallace, J. H.	Smithville	1870
Warren, J. A.	Wheelersburg	1872
Waterman, H. C.	Middleport	1868
Weber, G. C. E.	Cleveland	1857
Webster, E. M.	Kingsview	1876
Welsh, J. W.	Deersville	1873
Welsh, B. F.	London	1859
Weed, Frank J.	Cleveland	1870
Weaver, J. M.	Dayton	1865
Westbrock, A. E.	Ashley	1872
White, J. H.	Delaware	1866
Whitmar, Joel E.	Mount Hope	1874
Whiting, L. M.	Canton	1870
Whittaker, J. T.	Cincinnati	1871
Whitehead, A. M.	Springfield	1873
Wilson, J. L.	Greenfield	1871
Wilson, Samuel,	Wooster	1854
Wilson, Albert,	Sidney	1854
Wilson, W. F.	Ironton	1856
Wilson, W. H.	Greenfield	1865
Wilson, C. M.	Miami Springs	1872
Wilson, D. C.	Ironton	1872
Wise, S. P.	Millersburg	1875
Willard, G. P.	Tiffin	1875
Williams, A. S.	Fostoria	1852
Williams, E.	Cincinnati	1856
Williams, T. B.	Delaware	1860
Williams, A. Lee,	North Lewisburg	1871
Wilkins, John A.	Delta	1874
Wilbur, A. M.	West Unity	1874

NAME.	P. O. ADDRESS.	ADMITTED.
Wirth, R.	Columbus	1865
Willis, P. A.	Bellepoint	1868
Willis, T. A.	Bellepoint	1868
Wiggins, C. W.	Big Plain	1869
Wood, D. B.	Warren	1852
Wood, John R.	Warren	1871
Wood, D. M.	Warren	1875
Woods, J. T.	Toledo	1862
Woodbridge, T.	Youngstown	1870
Woodward, Warren,	Cincinnati	1871
Woodruff, L.	Alton	1867
Wolfley, W. J.	Columbus	1873
Worthington, A. T. C.	Middletown	1871
Wright, M. B.	Cincinnati	1852
Wylie, A. N.	Ripley	1866
Wylie, J. L.	Ripley	1872
West, T. J.	Melmore	1875
Yates, Porter,	Green Spring	1875

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G. S. B. Hempstead, M. D., Portsmouth, Ohio.
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Professor R. D. Mussey,* Cincinnati, Ohio.
J. F. Noyes, Delegate, Michigan State Medical Society.
Professor Willard Parker, New York.
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H. K. Steele, M. D., Denver, Colorado.
Geo. Sutton, M. D., Aurora, Indiana.
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Robert Thompson,* M. D., Columbus, Ohio.
Hill, E. L., Oxford, Ohio.

*Deceased.

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Professor Ed. C. Seaton, Medical Inspector of the Privy Council, London, England.

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